Aquifer Data - Drill Stem & Multipacker Tests (Cont'd)

Drill Stem Tests - SG-17 (Cont'd)

SHOUT
SHARE
IT

JOHNSTON

Schlumberger

technical report

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 18
COUNTY RIO BLANCO
STATE COLORADO

RECEIVED
DEC 16 1974
A. J. ROGERS

II B-901

F.R. #09103 C

JOHNSTON
...found a better way

SURFACE INFORMATION

ription (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool (12-4-74)	2243	-	-
CLOSED FOR INITIAL SHUT-IN	2244	-	-
FINISHED SHUT-IN	2314	-	-
RE-OPENED TOOL	2322	-	-
(12-5-74)			
INJECTED WATER AT 2 GAL/MIN	0335	-	-
STOPPED INJECTING	0350	-	-
INJECTED WATER AT 5 GAL/MIN	0400	-	-
STOPPED INJECTING	0415	-	-
INJECTED WATER AT 10 GAL/			
MIN	0425	-	-
STOPPED INJECTING	0440	-	-
INJECTED WATER AT 20 GAL/			
MIN	0455	-	-
STOPPED INJECTING	0510	-	-
INJECTED WATER AT 60 GAL/			
MIN	0520	-	-
STOPPED INJECTING	0524	-	-
INJECTED WATER AT 50 GAL/			
MIN	0524	-	-
STOPPED INJECTING	0535		
CLOSED FOR FINAL SHUT-IN	0700	-	-
PULLED PACKER LOOSE	0716	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested -
Elevation 7036 Ft.
Net Productive Interval 46 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1419 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. 2.16"
Drill Pipe Length 1041' I.D. 2.4"
Packer Depth(s) 1369' & 1373' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ____
cc. Oil ____
cc. Water ____
cc. Mud ____
Tot. Liquid cc. ____
Gravity ____ °API @ ____ °F.
Gas/Oil Ratio ____ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	____ @ ____ °F.	____ ppm
Recovery Mud	____ @ ____ °F.	
Recovery Mud Filtrate	____ @ ____ °F.	____ ppm
Mud Pit Sample	____ @ ____ °F.	
Mud Pit Sample Filtrate	____ @ ____ °F.	____ ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202
npany ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S-G #17 Location 436' FWL & 181' FSL SEC. 16-3S-96W
Test Interval 1373' TO 1419' Test # 18 Date 12-4-74
II B-902
County RIO BLANCO State COLORADO
Technician TAYLOR(VERNAL) Test Approved By MR. S. W. BERKHEISER, JR.
Field Report No. 09103 C
No. Reports Requested 15 (14x)

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)	1500		
Instrument Depth	1353'		
Instrument Opening	INSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	-		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09103 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.006653 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1	372.0		51	387.9		215	384.5	
2	386.8		52	387.9		216	387.5	
3 0	98.8		53	387.9		217	388.7	
4 1	204.6		54	388.3		218	389.4	
2	381.9		55	388.3		219	389.8	
3	384.1		56	388.7		220	389.8	
4	385.3		57	388.7		221	390.2	
5	386.0		58	388.7		222	390.2	
6	386.0		59	388.7		223	390.2	
7	386.4		60	389.0		224	390.5	
8	386.8		70	389.0		225	390.5	
9	387.1		80	389.4		230	390.5	
10	387.1		90	389.8		235	390.9	
15	387.5		100	390.5		240	391.7	
20	387.9		110	390.5		245	391.7	
25	388.3		120	391.3		250	391.7	
5 30	388.3		130	391.3		255	391.7	
35	389.0		140	391.3		260	392.1	
6 37	389.0		8 150	391.3		265	392.4	
7 38	227.7		9 152	415.1		270	392.4	
39	254.5		10 154	361.1		275	392.4	
40	303.3		11 155	376.6		280	392.4	
41	330.8		160	375.4		285	392.4	
42	356.9		170	374.7		290	392.4	
43	370.1		180	374.3		14 294	392.4	
44	377.7		190	374.3		296	393.6	
45	382.6		200	374.3		298	393.9	
46	384.5		12 210	374.3		300	394.3	
47	386.0		13 211	348.6	II B-903	302	394.3	
48	386.8		212	350.5		304	394.3	
49	387.1		213	369.0		306	394.3	
50	387.5		214	378.8		15 308	394.3	

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09103 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
310	394.3		20 372	394.7		432	402.3	
312	393.9		374	409.8		434	402.3	
314	393.6		376	416.6		436	402.3	
316	393.2		378	419.3		438	402.3	
16 318	393.2		380	421.2		440	401.9	
320	395.8		382	422.7		442	401.9	
322	398.1		384	423.8		444	401.9	
324	398.5		21 386	424.2		446	401.9	
326	398.9		388	415.9		448	401.9	
328	398.9		390	403.8		450	401.9	
330	398.9		392	399.6		452	401.9	
17 332	398.9		394	397.7		454	402.3	
334	397.4		22 396	397.4		456	402.3	
336	395.5		398	466.5		458	403.0	
338	394.7		400	532.6		460	403.0	
340	394.7		402	541.3		462	403.4	
18 342	394.3		404	559.1		464	403.4	
344	401.1		406	569.3		466	403.8	
346	405.3		408	573.5		468	403.8	
348	406.0		410	573.8		470	403.8	
350	406.8		23 411	574.2		472	404.2	
352	406.8		412	567.0		474	404.2	
354	406.8		414	513.0		476	404.2	
356	406.8		416	468.0		478	404.2	
9 357	407.2		418	438.2		480	403.4	
358	404.2		420	418.5		482	403.0	
360	398.1		422	409.4		484	402.6	
362	396.2		24 423	405.3	II B-904	486	402.3	
364	395.5		424	404.2		488	402.3	
366	395.1		426	403.8		490	402.3	
368	394.7		428	402.6		492	402.3	
370	394.7		430	402.3		494	402.3	

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. – 09103 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
496	402.3							
25 497	402.3							
498	399.6							
500	399.6							
502	399.6							
504	399.6							
506	399.6							
508	400.0							
510	400.0							
512	400.0							
26 513	400.0							
27	381.9							

PRESSURE DATA

Instrument No.	AK-1-5010		
Capacity (P.S.I.G.)	1600		
Instrument Depth	1382'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	-		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09103 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003444 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1		384.8			51	399.2			215	396.8	
2		398.4			52	399.6			216	398.4	
3	0	190.7			53	399.6			217	399.6	
4	1	247.1			54	400.0			218	400.4	
	2	392.8			55	400.0			219	400.8	
	3	395.6			56	400.0			220	401.2	
	4	396.8			57	400.0			221	401.6	
	5	397.2			58	400.4			222	401.6	
	6	397.6			59	400.4			223	401.6	
	7	398.4			60	400.4			224	401.6	
	8	398.4			70	400.8			225	401.6	
	9	398.4			80	401.2			230	402.0	
	10	398.4			90	401.2			235	402.4	
	15	398.8			100	401.6			240	402.8	
	20	399.2			110	402.0			245	403.2	
	25	399.6			120	402.0			250	403.2	
5	30	399.6			130	403.6			255	403.2	
	35	400.8			140	402.8			260	403.2	
6	37	400.8		8	150	402.8			265	403.2	
7	38	274.7		9	152	424.0			270	403.6	
	39	309.6		10	154	376.8			275	403.6	
	40	339.2		11	155	388.8			280	403.6	
	41	364.8			160	388.4			285	403.6	
	42	376.4			170	387.6			290	404.0	
	43	386.0			180	387.2		14	294	404.0	
	44	391.6			190	387.2			296	404.4	
	45	394.8			200	387.2			298	405.6	
	46	396.4		12	210	387.2			300	406.0	
	47	397.6		13	211	365.6			302	406.0	
	48	398.4			212	380.8			304	406.0	
	49	398.8			213	391.2			306	406.0	
	50	399.2			214	395.2		15	308	406.0	

II B-906

PRESSURE DATA

Instrument No.		AK-1-5010				
Capacity (P.S.I.G.)						
Instrument Depth						
Instrument Opening						
Pressure Gradient P.S.I./Ft.						
Well Temperature °F.					Time Given	Time Computed
Initial Hydrostatic Mud	A					
Initial Shut-in	B				Mins.	Mins.
Initial Flow	C				Mins.	Mins.
					Mins.	Mins.
					Mins.	Mins.
Final Flow	D				Mins.	Mins.
Final Shut-in	E				Mins.	Mins.
Final Hydrostatic Mud	F					

Field Report No. 09103 C

TIME DATA

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ____ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt
310	406.0		20 372	406.8		432	414.0	
312	405.6		374	420.8		434	414.0	
314	405.2		376	426.0		436	414.0	
316	405.2		378	429.2		438	414.0	
16 318	405.2		380	430.8		440	413.6	
320	408.0		382	432.0		442	413.6	
322	409.6		384	432.8		444	413.6	
324	410.0		21 386	433.6		446	413.6	
326	410.4		388	422.4		448	413.6	
328	410.4		390	414.0		450	413.6	
330	410.8		392	411.2		452	413.6	
17 332	410.8		394	410.0		454	413.6	
334	409.2		22 396	409.2		456	414.0	
336	407.2		398	486.4		458	414.0	
338	406.4		400	523.7		460	414.4	
340	406.0		402	535.3		462	414.8	
18 342	405.6		404	557.3		464	415.2	
344	413.2		406	569.3		466	415.2	
346	416.0		408	572.5		468	415.6	
348	416.8		410	573.7		470	415.6	
350	417.6		23 411	574.1		472	415.6	
352	417.6		412	556.1		474	415.6	
354	417.6		414	509.3		476	415.6	
356	418.0		416	468.0		478	415.6	
357	418.0		418	444.0		480	415.2	
358	416.0		420	426.8		482	414.8	
360	410.4		422	419.6		484	414.0	
362	408.4		24 423	417.2	II B-907	486	414.0	
364	407.2		424	416.4		488	413.6	
366	407.2		426	415.2		490	413.6	
368	406.8		428	414.4		492	413.6	
370	406.8		430	414.0		494	413.6	

JOHNSTON ...found a better way

PRESSURE DATA

Instrument No.	AK-1-5010		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			

Field Report No. 09103 C

TIME DATA

					Time Given	Time Computed
Initial Hydrostatic Mud	A					
Initial Shut-in	B				Mins.	Mins.
Initial Flow	C				Mins.	Mins.
					Mins.	Mins.
					Mins.	Mins.
Final Flow	D				Mins.	Mins.
Final Shut-in	E				Mins.	Mins.
Final Hydrostatic Mud	F					

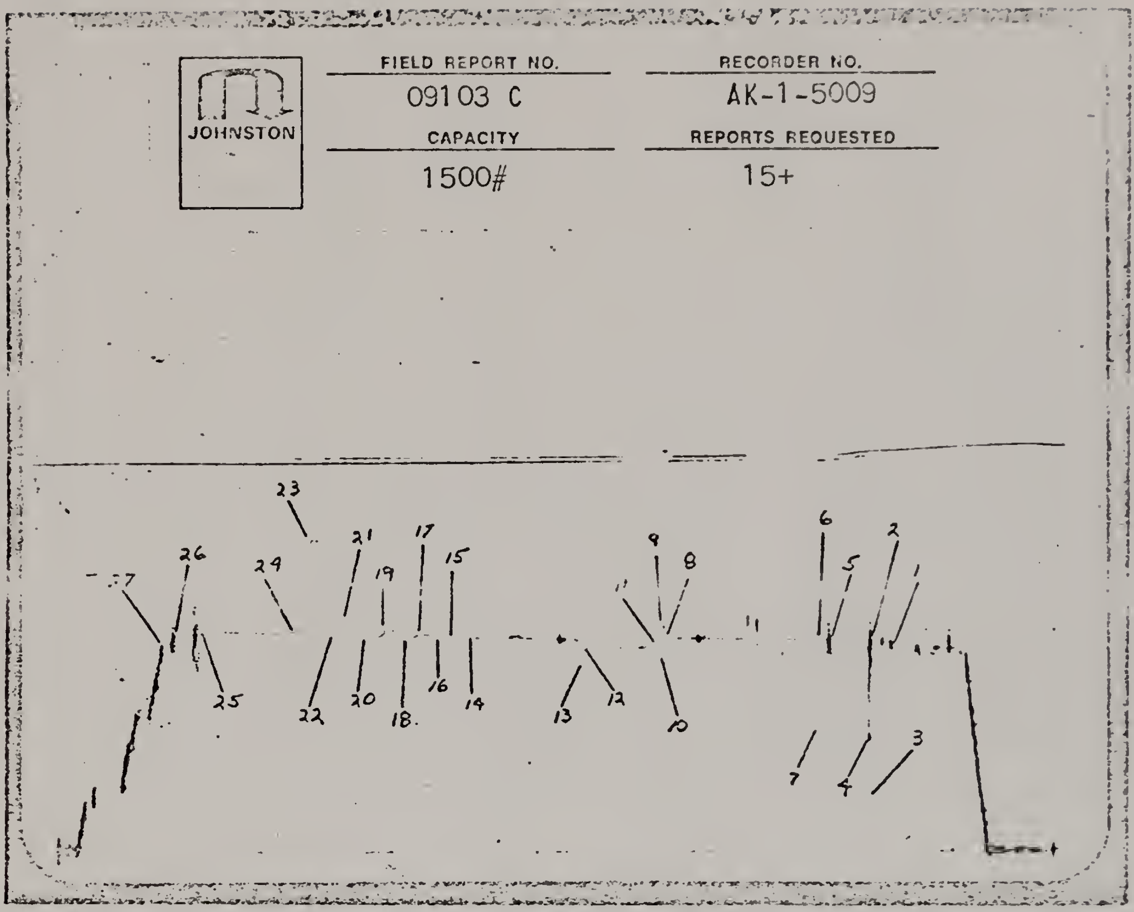
Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

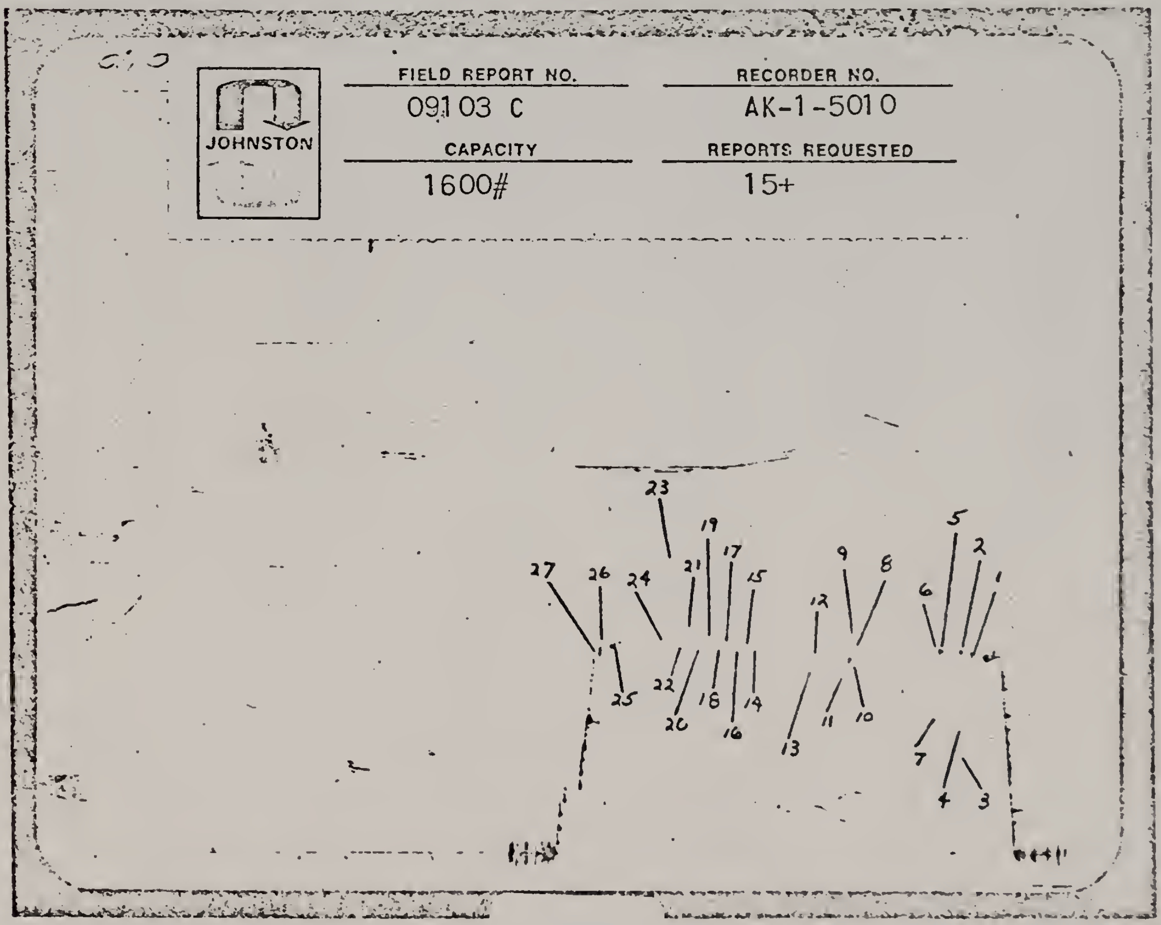
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
496	413.6							
25 497	413.6							
498	412.0							
500	412.0							
502	412.0							
504	412.0							
506	412.0							
508	412.0							
510	412.0							
512	412.0							
26 513	412.0							
27	393.2							



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09103 C	AK-1-5009
CAPACITY	**REPORTS REQUESTED**
1500#	15+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09103 C	AK-1-5010
CAPACITY	**REPORTS REQUESTED**
1600#	15+

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

DST 18

1373-[illegible]

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 145 WITH 1000 LB. ELEMENT

GAUGE DEPTH IS 1308 FT. OUTSIDE D.P.

ABOVE PACKER

TEST INTERVAL SURFACE TO 1373 FT.

SET PACKER DEPTH 1327 FT.

INITIAL HYDROSTATIC IS 376.25 PSI

FINAL HYDROSTATIC IS 372.23 PSI

GROUND LEVEL REFERENCE 7036 FT.

30 POINTS REPORTED THIS JOB

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	375.546	22	44	DEC 04,1974	SHUT IN
.017	375.683	22	45	DEC 04,1974	
.034	375.774	22	46	DEC 04,1974	
.052	375.934	22	47	DEC 04,1974	
.069	376.003	22	48	DEC 04,1974	
.086	376.162	22	49	DEC 04,1974	
.103	376.208	22	50	DEC 04,1974	
.121	376.254	22	51	DEC 04,1974	
.138	376.299	22	52	DEC 04,1974	
.155	376.345	22	53	DEC 04,1974	
.172	376.368	22	54	DEC 04,1974	
.190	376.391	22	55	DEC 04,1974	
.207	376.414	22	56	DEC 04,1974	
.224	376.459	22	57	DEC 04,1974	
.241	376.528	22	58	DEC 04,1974	
.259	376.528	23	00	DEC 04,1974	
.276	376.596	23	01	DEC 04,1974	
.293	376.619	23	02	DEC 04,1974	
.310	376.642	23	03	DEC 04,1974	
.328	376.688	23	04	DEC 04,1974	
.345	376.711	23	05	DEC 04,1974	
.362	376.733	23	06	DEC 04,1974	
.379	376.756	23	07	DEC 04,1974	
.397	376.779	23	08	DEC 04,1974	
.414	376.779	23	09	DEC 04,1974	
.431	376.825	23	10	DEC 04,1974	
.448	376.848	23	11	DEC 04,1974	
.466	376.871	23	12	DEC 04,1974	
.483	376.916	23	13	DEC 04,1974	
.500	377.053	23	14	DEC 04,1974	END SHUTIN

30 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	377.442	23	22	DEC 04,1974	START FLOW
.017	377.282	23	23	DEC 04,1974	
.033	377.236	23	24	DEC 04,1974	
.050	377.213	23	25	DEC 04,1974	
.067	377.213	23	26	DEC 04,1974	
.084	377.327	23	27	DEC 04,1974	
.100	377.373	23	28	DEC 04,1974	
.117	377.419	23	29	DEC 04,1974	
.134	377.556	23	30	DEC 04,1974	
.151	377.647	23	31	DEC 04,1974	
.167	377.693	23	32	DEC 04,1974	
.184	377.761	23	33	DEC 04,1974	
.201	377.784	23	34	DEC 04,1974	
.218	377.830	23	35	DEC 04,1974	
.234	377.898	23	36	DEC 04,1974	
.251	377.921	23	37	DEC 04,1974	
.268	377.967	23	38	DEC 04,1974	
.285	378.035	23	39	DEC 04,1974	
.301	378.081	23	40	DEC 04,1974	
.318	378.127	23	41	DEC 04,1974	
.335	378.058	23	42	DEC 04,1974	
.352	378.127	23	43	DEC 04,1974	
.368	378.172	23	44	DEC 04,1974	
.385	378.195	23	45	DEC 04,1974	
.402	378.218	23	46	DEC 04,1974	
.418	378.287	23	47	DEC 04,1974	
.435	378.310	23	48	DEC 04,1974	
.452	378.287	23	49	DEC 04,1974	
.469	378.332	23	50	DEC 04,1974	
.485	378.310	23	51	DEC 04,1974	
.502	378.332	23	52	DEC 04,1974	
.519	378.378	23	53	DEC 04,1974	
.536	378.401	23	54	DEC 04,1974	
.552	378.424	23	55	DEC 04,1974	
.569	378.447	23	56	DEC 04,1974	
.586	378.515	23	57	DEC 04,1974	
.603	378.515	23	58	DEC 04,1974	
.619	378.538	23	59	DEC 04,1974	
.636	378.515	00	00	DEC 05,1974	
.653	378.561	00	01	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
.670	378.606	00	02	DEC 05,1974	
.686	378.629	00	03	DEC 05,1974	
.703	378.629	00	04	DEC 05,1974	
.720	378.629	00	05	DEC 05,1974	
.737	378.652	00	06	DEC 05,1974	
.753	378.675	00	07	DEC 05,1974	
.770	378.721	00	08	DEC 05,1974	
.787	378.744	00	09	DEC 05,1974	
.804	378.766	00	10	DEC 05,1974	
.820	378.789	00	11	DEC 05,1974	
.837	378.812	00	12	DEC 05,1974	
.854	378.858	00	13	DEC 05,1974	
.870	378.858	00	14	DEC 05,1974	
.887	378.858	00	15	DEC 05,1974	
.904	378.926	00	16	DEC 05,1974	
.921	378.903	00	17	DEC 05,1974	
.937	378.972	00	18	DEC 05,1974	
.954	378.995	00	19	DEC 05,1974	
.971	379.040	00	20	DEC 05,1974	
.988	379.040	00	21	DEC 05,1974	
1.004	379.040	00	22	DEC 05,1974	
1.021	379.063	00	23	DEC 05,1974	
1.038	379.086	00	24	DEC 05,1974	
1.055	379.109	00	25	DEC 05,1974	
1.071	379.155	00	26	DEC 05,1974	
1.088	379.132	00	27	DEC 05,1974	
1.105	379.155	00	28	DEC 05,1974	
1.122	379.200	00	29	DEC 05,1974	
1.138	379.200	00	30	DEC 05,1974	
1.155	379.269	00	31	DEC 05,1974	
1.172	379.315	00	32	DEC 05,1974	
1.189	379.315	00	33	DEC 05,1974	
1.205	379.337	00	34	DEC 05,1974	
1.222	379.315	00	35	DEC 05,1974	
1.239	379.360	00	36	DEC 05,1974	
1.255	379.383	00	37	DEC 05,1974	
1.272	379.406	00	38	DEC 05,1974	
1.289	379.406	00	39	DEC 05,1974	
1.306	379.406	00	40	DEC 05,1974	
1.322	379.406	00	41	DEC 05,1974	

JOB NUMBER
SPG-11210-D

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
1.339	379.429	00 42	DEC 05,1974	
1.356	379.452	00 43	DEC 05,1974	
1.373	379.452	00 44	DEC 05,1974	
1.389	379.429	00 45	DEC 05,1974	
1.406	379.497	00 46	DEC 05,1974	
1.423	379.543	00 47	DEC 05,1974	
1.440	379.520	00 48	DEC 05,1974	
1.456	379.520	00 49	DEC 05,1974	
1.473	379.566	00 50	DEC 05,1974	
1.490	379.543	00 51	DEC 05,1974	
1.507	379.589	00 52	DEC 05,1974	
1.523	379.611	00 53	DEC 05,1974	
1.540	379.589	00 54	DEC 05,1974	
1.557	379.657	00 55	DEC 05,1974	
1.574	379.657	00 56	DEC 05,1974	
1.590	379.634	00 57	DEC 05,1974	
1.607	379.726	00 58	DEC 05,1974	
1.624	379.749	00 59	DEC 05,1974	
1.640	379.749	01 00	DEC 05,1974	
1.657	379.749	01 01	DEC 05,1974	
1.674	379.749	01 02	DEC 05,1974	
1.691	379.794	01 03	DEC 05,1974	
1.707	379.794	01 04	DEC 05,1974	
1.724	379.794	01 05	DEC 05,1974	
1.741	379.794	01 06	DEC 05,1974	
1.758	379.840	01 07	DEC 05,1974	
1.774	379.749	01 08	DEC 05,1974	
1.791	379.840	01 09	DEC 05,1974	
1.808	379.908	01 10	DEC 05,1974	
1.825	379.908	01 11	DEC 05,1974	
1.841	379.908	01 12	DEC 05,1974	START JETTING INSIDE DRILL PIPE
1.858	379.931	01 13	DEC 05,1974	
1.875	379.954	01 14	DEC 05,1974	
1.892	379.954	01 15	DEC 05,1974	
1.908	380.045	01 17	DEC 05,1974	
1.925	380.091	01 18	DEC 05,1974	
1.942	379.931	01 19	DEC 05,1974	
1.959	379.771	01 20	DEC 05,1974	
1.975	379.703	01 21	DEC 05,1974	
1.992	379.680	01 22	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.009	379.611	01	23	DEC 05,1974	
2.026	379.566	01	24	DEC 05,1974	
2.042	379.611	01	25	DEC 05,1974	
2.059	379.611	01	26	DEC 05,1974	
2.076	379.566	01	27	DEC 05,1974	
2.092	379.611	01	28	DEC 05,1974	
2.109	379.589	01	29	DEC 05,1974	
2.126	379.611	01	30	DEC 05,1974	
2.143	379.611	01	31	DEC 05,1974	
2.159	379.589	01	32	DEC 05,1974	
2.176	379.566	01	33	DEC 05,1974	
2.193	379.611	01	34	DEC 05,1974	
2.210	379.589	01	35	DEC 05,1974	
2.226	379.634	01	36	DEC 05,1974	
2.243	379.634	01	37	DEC 05,1974	
2.260	379.680	01	38	DEC 05,1974	
2.277	379.657	01	39	DEC 05,1974	
2.293	379.657	01	40	DEC 05,1974	
2.310	379.657	01	41	DEC 05,1974	
2.327	379.657	01	42	DEC 05,1974	
2.344	379.703	01	43	DEC 05,1974	
2.360	379.680	01	44	DEC 05,1974	
2.377	379.749	01	45	DEC 05,1974	
2.394	379.703	01	46	DEC 05,1974	
2.411	379.657	01	47	DEC 05,1974	
2.427	379.726	01	48	DEC 05,1974	
2.444	379.749	01	49	DEC 05,1974	
2.461	379.680	01	50	DEC 05,1974	
2.477	379.771	01	51	DEC 05,1974	
2.494	379.794	01	52	DEC 05,1974	
2.511	379.817	01	53	DEC 05,1974	
2.528	379.794	01	54	DEC 05,1974	
2.544	379.794	01	55	DEC 05,1974	
2.561	379.794	01	56	DEC 05,1974	
2.578	379.840	01	57	DEC 05,1974	
2.595	379.863	01	58	DEC 05,1974	
2.611	379.863	01	59	DEC 05,1974	
2.628	379.863	02	00	DEC 05,1974	
2.645	379.840	02	01	DEC 05,1974	
2.662	379.840	02	02	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.678	379.931	02	03	DEC 05,1974	
2.695	379.908	02	04	DEC 05,1974	
2.712	379.908	02	05	DEC 05,1974	
2.729	379.931	02	06	DEC 05,1974	
2.745	379.954	02	07	DEC 05,1974	
2.762	379.931	02	08	DEC 05,1974	
2.779	379.954	02	09	DEC 05,1974	
2.796	379.954	02	10	DEC 05,1974	
2.812	379.977	02	11	DEC 05,1974	
2.829	380.091	02	12	DEC 05,1974	END JETTING
2.846	380.045	02	13	DEC 05,1974	INSIDE DRILL
2.862	380.023	02	14	DEC 05,1974	PIPE
2.879	379.954	02	15	DEC 05,1974	
2.896	379.931	02	16	DEC 05,1974	
2.913	379.977	02	17	DEC 05,1974	
2.929	380.045	02	18	DEC 05,1974	
2.946	380.183	02	19	DEC 05,1974	
2.963	380.205	02	20	DEC 05,1974	
2.980	380.342	02	21	DEC 05,1974	
2.996	380.388	02	22	DEC 05,1974	
3.013	380.434	02	23	DEC 05,1974	
3.030	380.502	02	24	DEC 05,1974	
3.047	380.548	02	25	DEC 05,1974	
3.063	380.639	02	26	DEC 05,1974	
3.080	380.685	02	27	DEC 05,1974	
3.097	380.685	02	28	DEC 05,1974	
3.114	380.617	02	29	DEC 05,1974	
3.130	380.754	02	30	DEC 05,1974	
3.147	380.799	02	31	DEC 05,1974	
3.164	380.799	02	32	DEC 05,1974	
3.181	380.822	02	33	DEC 05,1974	
3.197	380.845	02	34	DEC 05,1974	
3.214	380.868	02	35	DEC 05,1974	
3.231	380.868	02	36	DEC 05,1974	
3.248	380.936	02	37	DEC 05,1974	
3.264	380.913	02	38	DEC 05,1974	
3.281	380.959	02	39	DEC 05,1974	
3.298	380.959	02	40	DEC 05,1974	
3.314	381.051	02	41	DEC 05,1974	
3.331	381.051	02	42	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.348	381.051	02	43	DEC 05,1974	
3.365	381.096	02	44	DEC 05,1974	
3.381	381.119	02	45	DEC 05,1974	
3.398	381.119	02	46	DEC 05,1974	
3.415	381.142	02	47	DEC 05,1974	
3.432	381.188	02	48	DEC 05,1974	
3.448	381.188	02	49	DEC 05,1974	
3.465	381.256	02	50	DEC 05,1974	
3.482	381.256	02	51	DEC 05,1974	
3.499	381.256	02	52	DEC 05,1974	
3.515	381.279	02	53	DEC 05,1974	
3.532	381.302	02	54	DEC 05,1974	
3.549	381.302	02	55	DEC 05,1974	
3.566	381.325	02	56	DEC 05,1974	
3.582	381.347	02	57	DEC 05,1974	
3.599	381.370	02	58	DEC 05,1974	
3.616	381.439	02	59	DEC 05,1974	
3.633	381.439	03	00	DEC 05,1974	
3.649	381.462	03	01	DEC 05,1974	
3.666	381.439	03	02	DEC 05,1974	
3.683	381.439	03	03	DEC 05,1974	
3.699	381.507	03	04	DEC 05,1974	
3.716	381.462	03	05	DEC 05,1974	
3.733	381.553	03	06	DEC 05,1974	
3.750	381.530	03	07	DEC 05,1974	
3.766	381.576	03	08	DEC 05,1974	
3.783	381.599	03	09	DEC 05,1974	
3.800	381.622	03	10	DEC 05,1974	
3.817	381.622	03	11	DEC 05,1974	
3.833	381.622	03	12	DEC 05,1974	
3.850	381.644	03	13	DEC 05,1974	
3.867	381.667	03	14	DEC 05,1974	
3.884	381.713	03	15	DEC 05,1974	
3.900	381.690	03	16	DEC 05,1974	
3.917	381.759	03	17	DEC 05,1974	
3.934	381.759	03	18	DEC 05,1974	
3.951	381.759	03	19	DEC 05,1974	
3.967	381.804	03	20	DEC 05,1974	
3.984	381.759	03	21	DEC 05,1974	
4.001	381.759	03	22	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
4.018	381.781	03	23	DEC 05,1974	
4.034	381.804	03	24	DEC 05,1974	
4.051	381.850	03	25	DEC 05,1974	
4.068	381.827	03	26	DEC 05,1974	
4.085	381.850	03	27	DEC 05,1974	
4.101	381.873	03	28	DEC 05,1974	
4.118	381.896	03	29	DEC 05,1974	
4.135	381.918	03	30	DEC 05,1974	
4.151	381.896	03	31	DEC 05,1974	
4.168	381.896	03	32	DEC 05,1974	
4.185	381.896	03	33	DEC 05,1974	
4.202	381.918	03	34	DEC 05,1974	
4.218	381.918	03	35	DEC 05,1974	2 G/M INSIDE
4.235	381.964	03	36	DEC 05,1974	DRILL PIPE
4.252	381.964	03	37	DEC 05,1974	
4.269	381.964	03	38	DEC 05,1974	
4.285	382.010	03	39	DEC 05,1974	
4.302	382.010	03	40	DEC 05,1974	
4.319	381.987	03	41	DEC 05,1974	
4.336	382.033	03	42	DEC 05,1974	
4.352	382.078	03	43	DEC 05,1974	
4.369	382.056	03	44	DEC 05,1974	
4.386	382.101	03	45	DEC 05,1974	
4.403	382.124	03	46	DEC 05,1974	
4.419	382.170	03	47	DEC 05,1974	
4.436	382.170	03	48	DEC 05,1974	
4.453	382.238	03	49	DEC 05,1974	
4.470	382.215	03	50	DEC 05,1974	DECLINE
4.486	382.261	03	51	DEC 05,1974	
4.503	382.261	03	52	DEC 05,1974	
4.520	382.261	03	53	DEC 05,1974	
4.536	382.261	03	54	DEC 05,1974	
4.553	382.284	03	55	DEC 05,1974	
4.570	382.261	03	56	DEC 05,1974	
4.587	382.352	03	57	DEC 05,1974	
4.603	382.284	03	58	DEC 05,1974	
4.620	382.330	03	59	DEC 05,1974	
4.637	382.330	04	00	DEC 05,1974	5 G/M INSIDE
4.654	382.330	04	01	DEC 05,1974	DRILL PIPE
4.670	382.330	04	02	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
4.687	382.375	04 03	DEC 05,1974	
4.704	382.467	04 04	DEC 05,1974	
4.721	382.490	04 05	DEC 05,1974	
4.737	382.512	04 06	DEC 05,1974	
4.754	382.535	04 07	DEC 05,1974	
4.771	382.535	04 08	DEC 05,1974	
4.788	382.649	04 09	DEC 05,1974	
4.804	382.581	04 10	DEC 05,1974	
4.821	382.581	04 11	DEC 05,1974	
4.838	382.672	04 12	DEC 05,1974	
4.855	382.695	04 13	DEC 05,1974	
4.871	382.695	04 14	DEC 05,1974	
4.888	382.764	04 15	DEC 05,1974	DECLINE
4.905	382.764	04 16	DEC 05,1974	
4.921	382.764	04 17	DEC 05,1974	
4.938	382.764	04 18	DEC 05,1974	
4.955	382.764	04 19	DEC 05,1974	
4.972	382.695	04 20	DEC 05,1974	
4.988	382.741	04 21	DEC 05,1974	
5.005	382.741	04 22	DEC 05,1974	
5.022	382.695	04 23	DEC 05,1974	
5.039	382.741	04 24	DEC 05,1974	
5.055	382.718	04 25	DEC 05,1974	10 G/M INSIDE
5.072	382.741	04 26	DEC 05,1974	DRILL PIPE
5.089	382.786	04 27	DEC 05,1974	
5.106	382.878	04 28	DEC 05,1974	
5.122	382.946	04 29	DEC 05,1974	
5.139	383.015	04 30	DEC 05,1974	
5.156	383.038	04 31	DEC 05,1974	
5.173	383.083	04 32	DEC 05,1974	
5.189	383.106	04 33	DEC 05,1974	
5.206	383.129	04 34	DEC 05,1974	
5.223	383.198	04 35	DEC 05,1974	
5.240	383.243	04 36	DEC 05,1974	
5.256	383.175	04 37	DEC 05,1974	
5.273	383.266	04 38	DEC 05,1974	
5.290	383.312	04 39	DEC 05,1974	
5.307	383.312	04 40	DEC 05,1974	DECLINE
5.323	383.357	04 41	DEC 05,1974	
5.340	383.335	04 42	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.357	383.2[illegible]	04	43	DEC 05,1974	
5.373	383.220	04	44	DEC 05,1974	
5.390	383.220	04	45	DEC 05,1974	
5.407	383.220	04	46	DEC 05,1974	
5.424	383.220	04	47	DEC 05,1974	
5.440	383.152	04	48	DEC 05,1974	
5.457	383.106	04	49	DEC 05,1974	
5.474	383.198	04	50	DEC 05,1974	
5.491	383.175	04	51	DEC 05,1974	
5.507	383.129	04	52	DEC 05,1974	
5.524	383.198	04	53	DEC 05,1974	
5.541	383.152	04	54	DEC 05,1974	
5.558	383.198	04	55	DEC 05,1974	20 G/M INSIDE
5.574	383.220	04	56	DEC 05,1974	DRILL PIPE
5.591	383.266	04	57	DEC 05,1974	
5.608	383.426	04	58	DEC 05,1974	
5.625	383.426	04	59	DEC 05,1974	
5.641	383.586	05	00	DEC 05,1974	
5.658	383.609	05	01	DEC 05,1974	
5.675	383.677	05	02	DEC 05,1974	
5.692	383.746	05	03	DEC 05,1974	
5.708	383.814	05	04	DEC 05,1974	
5.725	383.814	05	05	DEC 05,1974	
5.742	383.906	05	07	DEC 05,1974	
5.758	383.860	05	08	DEC 05,1974	
5.775	383.906	05	09	DEC 05,1974	
5.792	383.951	05	10	DEC 05,1974	DECLINE
5.809	383.951	05	11	DEC 05,1974	
5.825	383.951	05	12	DEC 05,1974	
5.842	383.906	05	13	DEC 05,1974	
5.859	383.837	05	14	DEC 05,1974	
5.876	383.837	05	15	DEC 05,1974	
5.892	383.769	05	16	DEC 05,1974	
5.909	383.791	05	17	DEC 05,1974	
5.926	383.723	05	18	DEC 05,1974	
5.943	383.746	05	19	DEC 05,1974	
5.959	383.700	05	20	DEC 05,1974	60 G/M INSIDE
5.976	383.654	05	21	DEC 05,1974	DRILL PIPE
5.993	383.883	05	22	DEC 05,1974	
6.010	384.134	05	23	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
6.026	384.431	05	24	DEC 05,1974	
6.043	384.705	05	25	DEC 05,1974	
6.060	384.888	05	26	DEC 05,1974	
6.077	385.116	05	27	DEC 05,1974	
6.093	385.253	05	28	DEC 05,1974	
6.110	385.185	05	29	DEC 05,1974	
6.127	385.185	05	30	DEC 05,1974	
6.143	385.299	05	31	DEC 05,1974	
6.160	385.459	05	32	DEC 05,1974	
6.177	385.687	05	33	DEC 05,1974	
6.194	385.847	05	34	DEC 05,1974	
6.210	385.893	05	35	DEC 05,1974	DECLINE
6.227	385.916	05	36	DEC 05,1974	
6.244	385.893	05	37	DEC 05,1974	
6.261	385.916	05	38	DEC 05,1974	
6.277	385.733	05	39	DEC 05,1974	
6.294	385.527	05	40	DEC 05,1974	
6.311	385.368	05	41	DEC 05,1974	
6.328	385.185	05	42	DEC 05,1974	
6.344	385.002	05	43	DEC 05,1974	
6.361	384.888	05	44	DEC 05,1974	
6.378	384.819	05	45	DEC 05,1974	
6.395	384.728	05	46	DEC 05,1974	
6.411	384.591	05	47	DEC 05,1974	
6.428	384.545	05	48	DEC 05,1974	
6.445	384.500	05	49	DEC 05,1974	
6.462	384.431	05	50	DEC 05,1974	20 G/M ANNULUS
6.478	384.385	05	51	DEC 05,1974	
6.495	384.385	05	52	DEC 05,1974	
6.512	385.208	05	53	DEC 05,1974	
6.529	385.824	05	54	DEC 05,1974	
6.545	386.258	05	55	DEC 05,1974	
6.562	386.647	05	56	DEC 05,1974	
6.579	386.738	05	57	DEC 05,1974	
6.595	387.058	05	58	DEC 05,1974	
6.612	387.195	05	59	DEC 05,1974	
6.629	387.286	06	00	DEC 05,1974	
6.646	387.378	06	01	DEC 05,1974	
6.662	387.492	06	02	DEC 05,1974	
6.679	387.560	06	03	DEC 05,1974	

JOB NUMBER
SPG-11210-D

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.696	387.537	06	04	DEC 05,1974	
6.713	387.652	06	05	DEC 05,1974	40 G/M ANNULUS
6.729	387.675	06	06	DEC 05,1974	
6.746	388.223	06	07	DEC 05,1974	
6.763	388.680	06	08	DEC 05,1974	
6.780	389.091	06	09	DEC 05,1974	
6.796	389.388	06	10	DEC 05,1974	
6.813	389.639	06	11	DEC 05,1974	
6.830	389.890	06	12	DEC 05,1974	
6.847	390.598	06	13	DEC 05,1974	
6.863	391.603	06	14	DEC 05,1974	
6.880	392.334	06	15	DEC 05,1974	
6.897	392.905	06	16	DEC 05,1974	
6.914	393.316	06	17	DEC 05,1974	
6.930	393.659	06	18	DEC 05,1974	
6.947	393.933	06	19	DEC 05,1974	
6.964	394.139	06	20	DEC 05,1974	60 G/M ANNULUS
6.980	394.847	06	21	DEC 05,1974	
6.997	396.423	06	22	DEC 05,1974	
7.014	397.451	06	23	DEC 05,1974	
7.031	398.410	06	24	DEC 05,1974	
7.047	399.164	06	25	DEC 05,1974	
7.064	399.758	06	26	DEC 05,1974	
7.081	400.352	06	27	DEC 05,1974	
7.098	400.808	06	28	DEC 05,1974	
7.114	401.311	06	29	DEC 05,1974	
7.131	401.791	06	30	DEC 05,1974	
7.148	402.202	06	31	DEC 05,1974	
7.165	402.499	06	32	DEC 05,1974	
7.181	402.796	06	33	DEC 05,1974	
7.198	403.138	06	34	DEC 05,1974	
7.215	403.481	06	35	DEC 05,1974	
7.232	403.572	06	36	DEC 05,1974	
7.248	403.732	06	37	DEC 05,1974	
7.265	403.892	06	38	DEC 05,1974	
7.282	404.052	06	39	DEC 05,1974	
7.299	404.166	06	40	DEC 05,1974	DECLINE
7.315	403.298	06	41	DEC 05,1974	
7.332	396.309	06	42	DEC 05,1974	
7.349	394.070	06	43	DEC 05,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
145 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
7.365	392.300	06	44	DEC 05,1974	
7.382	391.055	06	45	DEC 05,1974	
7.399	390.004	06	46	DEC 05,1974	
7.416	389.159	06	47	DEC 05,1974	
7.432	388.474	06	48	DEC 05,1974	
7.449	388.017	06	49	DEC 05,1974	
7.466	387.652	06	50	DEC 05,1974	
7.483	387.309	06	51	DEC 05,1974	
7.499	387.081	06	52	DEC 05,1974	
7.516	386.852	06	53	DEC 05,1974	
7.533	386.692	06	54	DEC 05,1974	
7.550	386.624	06	55	DEC 05,1974	
7.566	386.441	06	56	DEC 05,1974	
7.583	386.350	06	57	DEC 05,1974	
7.600	386.190	06	58	DEC 05,1974	
7.617	386.190	06	59	DEC 05,1974	
7.633	386.213	07	00	DEC 05,1974	END FLOW

457 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                          DATE OF JOB
SPG-11210-0                                                    DECEMBER 4, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
145  RUN NO. 15  DST NO. 18                                   DECEMBER 17, 1974

                               SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT


   DELTA    PRESSURE                      TIME      DATE              COMMENTS
   TIME      (PSI)                       HR MIN

   0.000     384.682                      07   00 DEC 05,1974    FINAL SHUTIN
    .017     384.637                      07   01 DEC 05,1974
    .033     384.865                      07   02 DEC 05,1974
    .050     384.774                      07   03 DEC 05,1974
    .067     384.774                      07   04 DEC 05,1974
    .083     384.796                      07   05 DEC 05,1974
    .100     384.774                      07   06 DEC 05,1974
    .117     384.774                      07   07 DEC 05,1974
    .133     384.774                      07   08 DEC 05,1974
    .150     384.751                      07   09 DEC 05,1974
    .167     384.682                      07   10 DEC 05,1974
    .183     384.659                      07   11 DEC 05,1974
    .200     384.637                      07   12 DEC 05,1974
    .217     384.637                      07   13 DEC 05,1974
    .233     384.614                      07   14 DEC 05,1974
    .250     384.614                      07   15 DEC 05,1974    END TEST
```

```
                       16 POINTS REPORTED THIS RUN
```

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 212 WITH 500 LB. ELEMENT

GAUGE DEPTH IS 1389 FT. INSIDE D.P.

BELOW PACKER

TEST INTERVAL 1373 TO 1419 FT.

SET PACKER DEPTH 1373 FT.

INITIAL HYDROSTATIC IS 405.07 PSI

FINAL HYDROSTATIC IS 400.56 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

466 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                        DATE OF JOB
SPG-11210-0                                                 DECEMBER 4, 1974

GAUGE/RUN NUMBER                                                  DATE OF RUN
212  RUN NO. 15  DST NO. 18                                DECEMBER 17, 1974

                               SPERRY-SUN
              PRECISION SUBSURFACE PRESSURE GAUGE REPORT


   DELTA   PRESSURE              TIME     DATE            COMMENTS
   TIME     (PSI)               HR MIN

   0.000    223.449             22  44 DEC 04,1974   INITIAL SHUTIN
    .016    396.846             22  45 DEC 04,1974
    .032    398.040             22  46 DEC 04,1974
    .048    402.361             22  47 DEC 04,1974
    .065    403.705             22  48 DEC 04,1974
    .081    404.412             22  49 DEC 04,1974
    .097    404.676             22  50 DEC 04,1974
    .113    405.165             22  51 DEC 04,1974
    .129    405.374             22  52 DEC 04,1974
    .145    405.559             22  53 DEC 04,1974
    .161    405.710             22  54 DEC 04,1974
    .177    405.814             22  55 DEC 04,1974
    .194    405.918             22  56 DEC 04,1974
    .210    406.011             22  57 DEC 04,1974
    .226    406.092             22  58 DEC 04,1974
    .242    406.138             22  59 DEC 04,1974
    .258    406.196             22  59 DEC 04,1974
    .274    406.266             23  00 DEC 04,1974
    .290    406.312             23  01 DEC 04,1974
    .306    406.359             23  02 DEC 04,1974
    .323    406.428             23  03 DEC 04,1974
    .339    406.451             23  04 DEC 04,1974
    .355    406.474             23  05 DEC 04,1974
    .371    406.521             23  06 DEC 04,1974
    .387    406.544             23  07 DEC 04,1974
    .403    406.590             23  08 DEC 04,1974
    .419    406.613             23  09 DEC 04,1974
    .435    406.648             23  10 DEC 04,1974
    .452    406.671             23  11 DEC 04,1974
    .468    406.718             23  12 DEC 04,1974
    .484    406.741             23  13 DEC 04,1974
    .500    406.764             23  14 DEC 04,1974   END SHUTIN
```

32 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                              DATE OF JOB
SPG-11210-0                                                        DECEMBER 4, 1974

GAUGE/RUN NUMBER                                                        DATE OF RUN
212  RUN NO. 15  DST NO. 18                                       DECEMBER 17, 1974

                                   SPERRY-SUN
                      PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                        TIME      DATE              COMMENTS
    TIME      (PSI)                         HR MIN

    0.000     326.067                       23   22 DEC 04,1974     START FLOW
     .017     355.021                       23   23 DEC 04,1974
     .034     369.897                       23   24 DEC 04,1974
     .051     387.937                       23   25 DEC 04,1974
     .068     389.814                       23   26 DEC 04,1974
     .085     396.985                       23   27 DEC 04,1974
     .102     401.539                       23   28 DEC 04,1974
     .120     403.705                       23   29 DEC 04,1974
     .137     404.852                       23   30 DEC 04,1974
     .154     405.501                       23   31 DEC 04,1974
     .171     405.965                       23   32 DEC 04,1974
     .188     406.289                       23   33 DEC 04,1974
     .205     406.532                       23   34 DEC 04,1974
     .222     406.729                       23   35 DEC 04,1974
     .239     406.857                       23   36 DEC 04,1974
     .256     406.996                       23   37 DEC 04,1974
     .273     407.065                       23   38 DEC 04,1974
     .290     407.227                       23   39 DEC 04,1974
     .307     407.274                       23   40 DEC 04,1974
     .324     407.367                       23   41 DEC 04,1974
     .342     407.506                       23   42 DEC 04,1974
     .359     407.552                       23   44 DEC 04,1974
     .376     407.598                       23   45 DEC 04,1974
     .393     407.679                       23   46 DEC 04,1974
     .410     407.679                       23   47 DEC 04,1974
     .427     407.703                       23   48 DEC 04,1974
     .444     407.749                       23   49 DEC 04,1974
     .461     407.807                       23   50 DEC 04,1974
     .478     407.830                       23   51 DEC 04,1974
     .495     407.865                       23   52 DEC 04,1974
     .512     407.911                       23   53 DEC 04,1974
     .529     407.934                       23   54 DEC 04,1974
     .546     407.957                       23   55 DEC 04,1974
     .564     407.992                       23   56 DEC 04,1974
     .581     408.085                       23   57 DEC 04,1974
     .598     408.108                       23   58 DEC 04,1974
     .615     408.131                       23   59 DEC 04,1974     GAUGE STOPPED
```

37 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                                DATE OF JOB
SPG-11210-0                                                          DECEMBER 4, 1974

GAUGE/RUN NUMBER                                                          DATE OF RUN
212  RUN NO. 15  DST NO. 18                                         DECEMBER 17, 1974

                                SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                        TIME     DATE              COMMENTS
     TIME      (PSI)                         HR MIN

     1.015     408.502                       00  23 DEC 04,1974     GAUGE STARTS
     1.033     408.525                       00  24 DEC 04,1974
     1.050     408.525                       00  25 DEC 04,1974
     1.067     408.560                       00  26 DEC 04,1974
     1.085     408.583                       00  27 DEC 04,1974
     1.102     408.595                       00  28 DEC 04,1974
     1.120     408.629                       00  29 DEC 04,1974
     1.137     408.629                       00  30 DEC 04,1974
     1.154     408.734                       00  31 DEC 04,1974
     1.172     408.757                       00  32 DEC 04,1974
     1.189     408.768                       00  33 DEC 04,1974
     1.206     408.792                       00  34 DEC 04,1974
     1.224     408.838                       00  36 DEC 04,1974
     1.241     408.861                       00  37 DEC 04,1974
     1.258     408.873                       00  38 DEC 04,1974
     1.276     408.873                       00  39 DEC 04,1974
     1.293     408.942                       00  40 DEC 04,1974
     1.311     409.823                       00  41 DEC 04,1974
     1.328     409.151                       00  42 DEC 04,1974
     1.345     409.313                       00  43 DEC 04,1974
     1.363     409.475                       00  44 DEC 04,1974
     1.380     409.232                       00  45 DEC 04,1974
     1.397     409.301                       00  46 DEC 04,1974
     1.415     409.371                       00  47 DEC 04,1974
     1.432     409.464                       00  48 DEC 04,1974
     1.449     409.823                       00  49 DEC 04,1974
     1.467     409.278                       00  50 DEC 04,1974
     1.484     409.336                       00  51 DEC 04,1974
     1.502     409.429                       00  52 DEC 04,1974
     1.519     409.255                       00  53 DEC 04,1974
     1.536     409.359                       00  54 DEC 04,1974
     1.554     409.243                       00  55 DEC 04,1974
     1.571     409.209                       00  56 DEC 04,1974
     1.588     409.197                       00  57 DEC 04,1974
     1.606     409.197                       00  58 DEC 04,1974
     1.623     409.220                       00  59 DEC 04,1974
     1.641     409.220                       01  01 DEC 04,1974
     1.658     409.417                       01  02 DEC 04,1974
     1.675     409.336                       01  03 DEC 04,1974
     1.693     409.313                       01  04 DEC 04,1974
```

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.710	409.313	01	05	DEC 04,1974	
1.727	409.313	01	06	DEC 04,1974	
1.745	409.325	01	07	DEC 04,1974	
1.762	409.325	01	08	DEC 04,1974	
1.779	409.336	01	09	DEC 04,1974	
1.797	409.348	01	10	DEC 04,1974	
1.814	409.359	01	11	DEC 04,1974	
1.832	409.382	01	12	DEC 04,1974	START JETTING
1.849	428.054	01	13	DEC 04,1974	INSIDE DRILL
1.866	399.279	01	14	DEC 04,1974	PIPE
1.884	385.793	01	15	DEC 04,1974	
1.901	396.302	01	16	DEC 04,1974	
1.918	395.850	01	17	DEC 04,1974	
1.936	394.726	01	18	DEC 04,1974	
1.953	394.622	01	19	DEC 04,1974	
1.970	394.228	01	20	DEC 04,1974	
1.988	393.938	01	21	DEC 04,1974	
2.005	393.961	01	22	DEC 04,1974	
2.023	393.463	01	23	DEC 04,1974	
2.040	393.730	01	24	DEC 04,1974	
2.057	393.822	01	26	DEC 04,1974	
2.075	393.660	01	27	DEC 04,1974	
2.092	393.602	01	28	DEC 04,1974	
2.109	393.568	01	29	DEC 04,1974	
2.127	393.510	01	30	DEC 04,1974	
2.144	393.359	01	31	DEC 04,1974	
2.162	393.405	01	32	DEC 04,1974	
2.179	393.336	01	33	DEC 04,1974	
2.196	393.324	01	34	DEC 04,1974	
2.214	393.301	01	35	DEC 04,1974	
2.231	393.324	01	36	DEC 04,1974	
2.248	393.266	01	37	DEC 04,1974	
2.266	393.289	01	38	DEC 04,1974	
2.283	393.162	01	39	DEC 04,1974	
2.300	393.266	01	40	DEC 04,1974	
2.318	393.243	01	41	DEC 04,1974	
2.335	393.162	01	42	DEC 04,1974	
2.353	393.185	01	43	DEC 04,1974	
2.370	393.208	01	44	DEC 04,1974	
2.387	393.150	01	45	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.405	393.162	01	46	DEC 04,1974	
2.422	393.220	01	47	DEC 04,1974	
2.439	393.150	01	48	DEC 04,1974	
2.457	393.162	01	49	DEC 04,1974	
2.474	393.116	01	51	DEC 04,1974	
2.491	393.162	01	52	DEC 04,1974	
2.509	393.104	01	53	DEC 04,1974	
2.526	393.150	01	54	DEC 04,1974	
2.544	393.150	01	55	DEC 04,1974	
2.561	393.197	01	56	DEC 04,1974	
2.578	393.116	01	57	DEC 04,1974	
2.596	393.150	01	58	DEC 04,1974	
2.613	393.069	01	59	DEC 04,1974	
2.630	393.208	02	00	DEC 04,1974	
2.648	393.092	02	01	DEC 04,1974	
2.665	393.116	02	02	DEC 04,1974	
2.683	393.197	02	03	DEC 04,1974	
2.700	393.208	02	04	DEC 04,1974	
2.717	393.069	02	05	DEC 04,1974	
2.735	393.092	02	06	DEC 04,1974	
2.752	393.116	02	07	DEC 04,1974	
2.769	393.116	02	08	DEC 04,1974	
2.787	379.444	02	09	DEC 04,1974	
2.804	374.752	02	10	DEC 04,1974	
2.821	384.959	02	11	DEC 04,1974	
2.839	393.788	02	12	DEC 04,1974	END JETTING INSIDE DRILL PIPE
2.856	401.249	02	13	DEC 04,1974	
2.874	405.003	02	14	DEC 04,1974	
2.891	406.718	02	16	DEC 04,1974	
2.908	407.355	02	17	DEC 04,1974	
2.926	407.923	02	18	DEC 04,1974	
2.943	408.270	02	19	DEC 04,1974	
2.960	408.514	02	20	DEC 04,1974	
2.978	408.676	02	21	DEC 04,1974	
2.995	408.502	02	22	DEC 04,1974	
3.012	408.826	02	23	DEC 04,1974	
3.030	408.965	02	24	DEC 04,1974	
3.047	408.931	02	25	DEC 04,1974	
3.065	408.884	02	26	DEC 04,1974	
3.082	408.884	02	27	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.099	408.803	02	28	DEC 04,1974	
3.117	408.815	02	29	DEC 04,1974	
3.134	408.838	02	30	DEC 04,1974	
3.151	408.965	02	31	DEC 04,1974	
3.169	408.931	02	32	DEC 04,1974	
3.186	408.850	02	33	DEC 04,1974	
3.204	409.220	02	34	DEC 04,1974	
3.221	409.406	02	35	DEC 04,1974	
3.238	409.487	02	36	DEC 04,1974	
3.256	409.556	02	37	DEC 04,1974	
3.273	409.603	02	38	DEC 04,1974	
3.290	409.614	02	40	DEC 04,1974	
3.308	409.672	02	41	DEC 04,1974	
3.325	409.695	02	42	DEC 04,1974	
3.342	409.718	02	43	DEC 04,1974	
3.360	409.765	02	44	DEC 04,1974	
3.377	409.788	02	45	DEC 04,1974	
3.395	409.800	02	46	DEC 04,1974	
3.412	409.811	02	47	DEC 04,1974	
3.429	409.834	02	48	DEC 04,1974	
3.447	409.846	02	49	DEC 04,1974	
3.464	409.892	02	50	DEC 04,1974	
3.481	409.892	02	51	DEC 04,1974	
3.499	409.904	02	52	DEC 04,1974	
3.516	409.939	02	53	DEC 04,1974	
3.533	409.950	02	54	DEC 04,1974	
3.551	409.985	02	55	DEC 04,1974	
3.568	409.997	02	56	DEC 04,1974	
3.586	410.020	02	57	DEC 04,1974	
3.603	410.043	02	58	DEC 04,1974	
3.620	410.054	02	59	DEC 04,1974	
3.638	410.078	03	00	DEC 04,1974	
3.655	410.089	03	01	DEC 04,1974	
3.672	410.124	03	02	DEC 04,1974	
3.690	410.124	03	03	DEC 04,1974	
3.707	410.136	03	05	DEC 04,1974	
3.725	410.159	03	06	DEC 04,1974	
3.742	410.437	03	07	DEC 04,1974	
3.759	410.275	03	08	DEC 04,1974	
3.777	410.240	03	09	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.794	410.240	03	10	DEC 04,1974	
3.611	410.240	03	11	DEC 04,1974	
3.629	410.251	03	12	DEC 04,1974	
3.846	410.263	03	13	DEC 04,1974	
3.863	410.275	03	14	DEC 04,1974	
3.881	410.286	03	15	DEC 04,1974	
3.898	410.298	03	16	DEC 04,1974	
3.916	410.309	03	17	DEC 04,1974	
3.933	410.333	03	18	DEC 04,1974	
3.950	410.356	03	19	DEC 04,1974	
3.968	410.356	03	20	DEC 04,1974	
3.985	410.367	03	21	DEC 04,1974	
4.002	410.390	03	22	DEC 04,1974	
4.020	410.414	03	23	DEC 04,1974	
4.037	410.414	03	24	DEC 04,1974	
4.054	410.437	03	25	DEC 04,1974	
4.072	410.460	03	26	DEC 04,1974	
4.089	410.448	03	27	DEC 04,1974	
4.107	410.460	03	28	DEC 04,1974	
4.124	410.472	03	30	DEC 04,1974	
4.141	410.495	03	31	DEC 04,1974	
4.159	410.506	03	32	DEC 04,1974	
4.176	410.518	03	33	DEC 04,1974	
4.193	410.541	03	34	DEC 04,1974	
4.211	410.564	03	35	DEC 04,1974	2 G/M INSIDE
4.228	410.564	03	36	DEC 04,1974	DRILL PIPE
4.246	410.587	03	37	DEC 04,1974	
4.263	411.329	03	38	DEC 04,1974	
4.280	411.955	03	39	DEC 04,1974	
4.298	412.302	03	40	DEC 04,1974	
4.315	412.418	03	41	DEC 04,1974	
4.332	412.453	03	42	DEC 04,1974	
4.350	412.534	03	43	DEC 04,1974	
4.367	412.580	03	44	DEC 04,1974	
4.384	412.603	03	45	DEC 04,1974	
4.402	412.650	03	46	DEC 04,1974	
4.419	412.661	03	47	DEC 04,1974	
4.437	412.719	03	48	DEC 04,1974	
4.454	412.719	03	49	DEC 04,1974	
4.471	412.754	03	50	DEC 04,1974	DECLINE

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
4.489	413.044	03	51	DEC 04,1974	
4.506	412.441	03	52	DEC 04,1974	
4.523	411.781	03	53	DEC 04,1974	
4.541	411.480	03	55	DEC 04,1974	
4.558	411.329	03	56	DEC 04,1974	
4.575	411.236	03	57	DEC 04,1974	
4.593	411.167	03	58	DEC 04,1974	
4.610	411.120	03	59	DEC 04,1974	
4.628	411.097	04	00	DEC 04,1974	5 G/M INSIDE
4.645	411.097	04	01	DEC 04,1974	DRILL PIPE
4.662	411.097	04	02	DEC 04,1974	
4.680	414.029	04	03	DEC 04,1974	
4.697	416.311	04	04	DEC 04,1974	
4.714	416.682	04	05	DEC 04,1974	
4.732	416.867	04	06	DEC 04,1974	
4.749	417.041	04	07	DEC 04,1974	
4.767	417.145	04	08	DEC 04,1974	
4.784	417.215	04	09	DEC 04,1974	
4.801	417.261	04	10	DEC 04,1974	
4.819	417.296	04	11	DEC 04,1974	
4.836	417.342	04	12	DEC 04,1974	
4.853	417.354	04	13	DEC 04,1974	
4.871	417.400	04	14	DEC 04,1974	
4.888	417.435	04	15	DEC 04,1974	DECLINE
4.905	416.114	04	16	DEC 04,1974	
4.923	414.179	04	17	DEC 04,1974	
4.940	412.986	04	18	DEC 04,1974	
4.958	412.360	04	20	DEC 04,1974	
4.975	412.024	04	21	DEC 04,1974	
4.992	411.839	04	22	DEC 04,1974	
5.010	411.723	04	23	DEC 04,1974	
5.027	411.642	04	24	DEC 04,1974	
5.044	411.584	04	25	DEC 04,1974	10 G/M INSIDE
5.062	411.827	04	26	DEC 04,1974	DRILL PIPE
5.079	415.315	04	27	DEC 04,1974	
5.096	420.389	04	28	DEC 04,1974	
5.114	423.346	04	29	DEC 04,1974	
5.131	423.624	04	30	DEC 04,1974	
5.149	423.960	04	31	DEC 04,1974	
5.166	424.134	04	32	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.183	424.239	04	33	DEC 04,1974	
5.201	424.320	04	34	DEC 04,1974	
5.218	424.413	04	35	DEC 04,1974	
5.235	424.424	04	36	DEC 04,1974	
5.253	424.436	04	37	DEC 04,1974	
5.270	424.540	04	38	DEC 04,1974	
5.288	424.598	04	39	DEC 04,1974	
5.305	424.204	04	40	DEC 04,1974	DECLINE
5.322	419.486	04	41	DEC 04,1974	
5.340	416.137	04	42	DEC 04,1974	
5.357	414.376	04	43	DEC 04,1974	
5.374	413.403	04	45	DEC 04,1974	
5.392	412.997	04	46	DEC 04,1974	
5.409	412.592	04	47	DEC 04,1974	
5.426	412.488	04	48	DEC 04,1974	
5.444	412.349	04	49	DEC 04,1974	
5.461	412.244	04	50	DEC 04,1974	
5.479	412.152	04	51	DEC 04,1974	
5.496	412.163	04	52	DEC 04,1974	
5.513	412.105	04	53	DEC 04,1974	
5.531	412.209	04	54	DEC 04,1974	
5.548	412.140	04	55	DEC 04,1974	20 G/M INSIDE
5.565	412.685	04	56	DEC 04,1974	DRILL PIPE
5.583	422.047	04	57	DEC 04,1974	
5.600	428.541	04	58	DEC 04,1974	
5.617	431.846	04	59	DEC 04,1974	
5.635	435.151	05	00	DEC 04,1974	
5.652	436.461	05	01	DEC 04,1974	
5.670	437.191	05	02	DEC 04,1974	
5.687	437.794	05	03	DEC 04.1974	
5.704	438.363	05	04	DEC 04,1974	
5.722	438.815	05	05	DEC 04,1974	
5.739	439.487	05	06	DEC 04,1974	
5.756	439.824	05	07	DEC 04,1974	
5.774	440.056	05	09	DEC 04,1974	
5.791	440.404	05	10	DEC 04,1974	DECLINE
5.809	437.922	05	11	DEC 04,1974	
5.826	427.694	05	12	DEC 04,1974	
5.843	421.653	05	13	DEC 04,1974	
5.861	418.408	05	14	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.878	416.612	05	15	DEC 04,1974	
5.895	415.604	05	16	DEC 04,1974	
5.913	414.979	05	17	DEC 04,1974	
5.930	414.585	05	18	DEC 04,1974	
5.947	414.318	05	19	DEC 04,1974	
5.965	435.568	05	20	DEC 04,1974	60 G/M INSIDE
5.982	506.072	05	21	DEC 04,1974	DRILL PIPE
6.000	524.904	05	22	DEC 04,1974	
6.017	527.780	05	23	DEC 04,1974	
6.034	534.181	05	24	DEC 04,1974	
6.052	556.932	05	25	DEC 04,1974	
6.069	557.512	05	26	DEC 04,1974	
6.086	565.873	05	27	DEC 04,1974	
6.104	572.250	05	28	DEC 04,1974	
6.121	577.040	05	29	DEC 04,1974	
6.138	578.988	05	30	DEC 04,1974	
6.156	579.220	05	31	DEC 04,1974	
6.173	580.020	05	32	DEC 04,1974	
6.191	580.588	05	34	DEC 04,1974	
6.208	580.692	05	35	DEC 04,1974	DECLINE
6.225	566.951	05	36	DEC 04,1974	
6.243	553.418	05	37	DEC 04,1974	
6.260	549.754	05	38	DEC 04,1974	
6.277	536.198	05	39	DEC 04,1974	
6.295	522.782	05	40	DEC 04,1974	
6.312	521.738	05	41	DEC 04,1974	
6.330	508.298	05	42	DEC 04,1974	
6.347	497.931	05	43	DEC 04,1974	
6.364	484.735	05	44	DEC 04,1974	
6.382	478.241	05	45	DEC 04,1974	
6.399	465.289	05	46	DEC 04,1974	
6.416	462.853	05	47	DEC 04,1974	
6.434	450.411	05	48	DEC 04,1974	
6.451	440.844	05	49	DEC 04,1974	
6.468	433.608	05	50	DEC 04,1974	20 G/M ANNULUS
6.486	428.587	05	51	DEC 04,1974	
6.503	425.491	05	52	DEC 04,1974	
6.521	423.589	05	53	DEC 04,1974	
6.538	422.383	05	54	DEC 04,1974	
6.555	421.548	05	55	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
6.573	421.015	05	56	DEC 04,1974	
6.590	420.644	05	57	DEC 04,1974	
6.607	420.355	05	59	DEC 04,1974	
6.625	420.169	06	00	DEC 04,1974	
6.642	420.076	06	01	DEC 04,1974	
6.659	420.019	06	02	DEC 04,1974	
6.677	419.961	06	03	DEC 04,1974	
6.694	419.926	06	04	DEC 04,1974	
6.712	419.903	06	05	DEC 04,1974	40 G/M ANNULUS
6.729	419.879	06	06	DEC 04,1974	
6.746	419.845	06	07	DEC 04,1974	
6.764	419.810	06	08	DEC 04,1974	
6.781	419.810	06	09	DEC 04,1974	
6.798	419.810	06	10	DEC 04,1974	
6.816	419.798	06	11	DEC 04,1974	
6.833	419.764	06	12	DEC 04,1974	
6.851	419.764	06	13	DEC 04,1974	
6.868	419.775	06	14	DEC 04,1974	
6.885	419.822	06	15	DEC 04,1974	
6.903	419.845	06	16	DEC 04,1974	
6.920	419.903	06	17	DEC 04,1974	
6.937	419.949	06	18	DEC 04,1974	
6.955	419.995	06	19	DEC 04,1974	
6.972	420.042	06	20	DEC 04,1974	
6.989	420.158	06	21	DEC 04,1974	
7.007	420.285	06	22	DEC 04,1974	
7.024	420.389	06	24	DEC 04,1974	
7.042	420.482	06	25	DEC 04,1974	
7.059	420.586	06	26	DEC 04,1974	
7.076	420.679	06	27	DEC 04,1974	
7.094	420.737	06	28	DEC 04,1974	
7.111	420.818	06	29	DEC 04,1974	
7.128	420.980	06	30	DEC 04,1974	
7.146	422.105	06	31	DEC 04,1974	
7.163	422.175	06	32	DEC 04,1974	
7.180	422.221	06	33	DEC 04,1974	
7.198	422.302	06	34	DEC 04,1974	
7.215	422.511	06	35	DEC 04,1974	
7.233	422.511	06	36	DEC 04,1974	
7.250	422.499	06	37	DEC 04,1974	

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO, 15 DST NO, 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7,267	422,511	06	38	DEC 04,1974	
7,285	422,522	06	39	DEC 04,1974	
7,302	421,850	06	40	DEC 04,1974	DECLINE
7,319	421,490	06	41	DEC 04,1974	
7,337	421,177	06	42	DEC 04,1974	
7,354	420,887	06	43	DEC 04,1974	
7,371	420,725	06	44	DEC 04,1974	
7,389	420,389	06	45	DEC 04,1974	
7,406	419,856	06	46	DEC 04,1974	
7,424	419,879	06	47	DEC 04,1974	
7,441	419,845	06	49	DEC 04,1974	
7,458	419,787	06	50	DEC 04,1974	
7,476	419,740	06	51	DEC 04,1974	
7,493	419,740	06	52	DEC 04,1974	
7,510	419,659	06	53	DEC 04,1974	
7,528	419,613	06	54	DEC 04,1974	
7,545	419,578	06	55	DEC 04,1974	
7,563	419,567	06	56	DEC 04,1974	
7,580	419,532	06	57	DEC 04,1974	
7,597	419,509	06	58	DEC 04,1974	
7,615	418,060	06	59	DEC 04,1974	
7,632	417,307	07	00	DEC 04,1974	END FLOW

382 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 4, 1974

GAUGE/RUN NUMBER
212 RUN NO. 15 DST NO. 18

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
0.000	417.307	07	00	DEC 05,1974	FINAL SHUT IN
.018	418.026	07	01	DEC 05,1974	
.036	418.269	07	02	DEC 05,1974	
.054	418.350	07	03	DEC 05,1974	
.071	418.408	07	04	DEC 05,1974	
.089	418.431	07	05	DEC 05,1974	
.107	418.478	07	06	DEC 05,1974	
.125	418.501	07	08	DEC 05,1974	
.143	418.512	07	09	DEC 05,1974	
.161	418.524	07	10	DEC 05,1974	
.179	418.547	07	11	DEC 05,1974	
.196	418.559	07	12	DEC 05,1974	
.214	418.559	07	13	DEC 05,1974	
.232	418.582	07	14	DEC 05,1974	
.250	418.605	07	15	DEC 05,1974	END TEST

15 POINTS REPORTED THIS RUN

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210 O Date Dec 4, 74 Run DST-18 Office Casper

Customer Arco Et Al Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio Blanco

Well Sorghum Gulch No. 17 Field Tract Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/Dock	1. 1900	12/4/74	2.		
Depart: Well/Dock	1. 10:30	12/5/74	2.	12/5/74	15½ Hrs.
Gauge Start in Hole	1. 2057	12/4/74	2. 2059	12/4/74	
Gauge Out of Hole	1. [illegible]	12/5/74	2. [illegible]	12/5/74	[illegible] Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # 145 Element # 32763 Range 1000 Time Mode 1

Btm.Gauge # 212 Element # 30947 Range 500 Time Mode 1

Type Tool Pressure Gauge Test Depth 1373-1419 Zero Point Ground level

Packer Depth 1373 Tail Pipe Depth Top Gauge Depth 1308

Bottom Hole Temp. 94 Atmos. Temp. Bottom Gauge Depth 1387

TIME INFORMATION	Time	Date	PRESSURE INFORMATION		
On Bottom	2158 ~~[illegible]~~	12/4/74	Initial Hydrostatic ~~Mud~~	.96	5010
Packer Set	2236	12/4/74	Initial Draw Down	.48	
Initial Open	2243	12/4/74	Initial Build-Up	.99	
Initial Shut-In	2244	12/4/74	Final Flow	.68	
Start Flow	3 2322	12/4/74	Final Build-Up	1.43	
Final Shut-In	0700	12/5/74	Final Hydrostatic ~~Mud~~	1.02	
Packer Unseated	0715	12/5/74	~~Mud Weight~~		

TIME OF SURFACE NULLS

Top Gauge 20~~[illegible]~~ 47-20 20~~[illegible]~~ 48-20 20~~[illegible]~~ 49-20 Bottom Gauge 2017-55 2018-55 2019-55

Remarks

SP-423

II B-939

Ken Perales
Operator

→ Howard Dennis / JRM

JOHNSTON
Schlumberger

technical report

RECEIVED
DEC 19 1974
A. J. ROGERS

II B-940

F.R. #09104 C

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 19
COUNTY RIO BLANCO
STATE COLORADO

JOHNSTON
...found a better way

SURFACE INFORMATION

ription (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	1417	-	-
CLOSED FOR INITIAL SHUT-IN	1418	-	-
FINISHED SHUT-IN	1448	-	-
RE-OPENED TOOL	1455	-	-
DROPPED TUBING IN HOLE	1715	-	-
CLOSED FOR FINAL SHUT-IN	1735	-	-
PULLED PACKER LOOSE	1746	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER - FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 47 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1470 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1009' I.D. -
Packer Depth(s) 1417' & 1423' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: UNSUCCESSFUL TEST; DROPPED 3/4" PIPE INTO DRILL PIPE.

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202

Company ATLANTIC-RICHFIELD COMPANY
Field SORGHUM GULCH
Well FEDERAL S-G #17
Location 436' FWL & 181' FSL SEC. 16-3S-96W
Test Interval 1423' TO 1470' (UNSUCCESSFUL)
Test # 19
Date 12-6-74

II B-941

County RIO BLANCO
State COLORADO
Technician TAYLOR (VERNAL)
Test Approved By MR. JERRY L. BUSSELL
Field Report No. 09104 C
No. Reports Requested 15 (14x)

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)	1500		
Instrument Depth	1403'		
Instrument Opening	INSIDE		
Pressure Gradient P.S.I./Ft.			
Wall Temperature °F.	-		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09104 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

UNSUCCESSFUL TEST

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.006650 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	(T + Δt) / Δt	Point	Minutes	Pressure	(T + Δt) / Δt	Point	Minutes	Pressure	(T + Δt) / Δt
1		402.3			47	376.9			196	411.0	
2		403.4			48	385.6		10	197	411.0	
3	0	64.0			49	389.0			198	411.0	
	1	101.8			50	395.5			199	411.0	
4	2	111.3			51	399.6			200	411.3	
	3	408.7			52	402.3			201	415.1	
	4	409.1			53	404.5			202	415.5	
	5	409.1			54	406.0			203	415.5	
	6	409.1			55	407.2			204	415.5	
	7	409.4			56	407.5			205	415.5	
	8	409.8			57	408.7			206	415.5	
	9	409.8			58	409.1			207	415.5	
	10	409.8			59	409.4			208	415.5	
	11	409.8		8	60	409.8		11	209	415.5	
	12	409.8			70	409.8		12		400.4	
	13	409.8			80	410.2					
	14	409.8			90	410.2					
	15	409.8			100	411.0					
	20	409.8			110	411.7					
	25	410.6			120	412.1					
5	30	410.6			130	412.5					
	35	412.1			140	412.5					
6	37	412.1			150	412.8					
7	38	133.2			160	413.2					
	39	257.5			170	414.0					
	40	276.4			180	414.4					
	41	298.3		9	190	414.7					
	42	314.2			191	415.1					
	43	331.2			192	415.5					
	44	348.2			193	411.0					
	45	358.8			194	411.0					
	46	367.5			195	411.0					

II B-942

PRESSURE DATA

Instrument No.	AK-1-5010		
Capacity (P.S.I.G.)	1600		
Instrument Depth	1432'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	–		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09104 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

UNSUCCESSFUL TEST

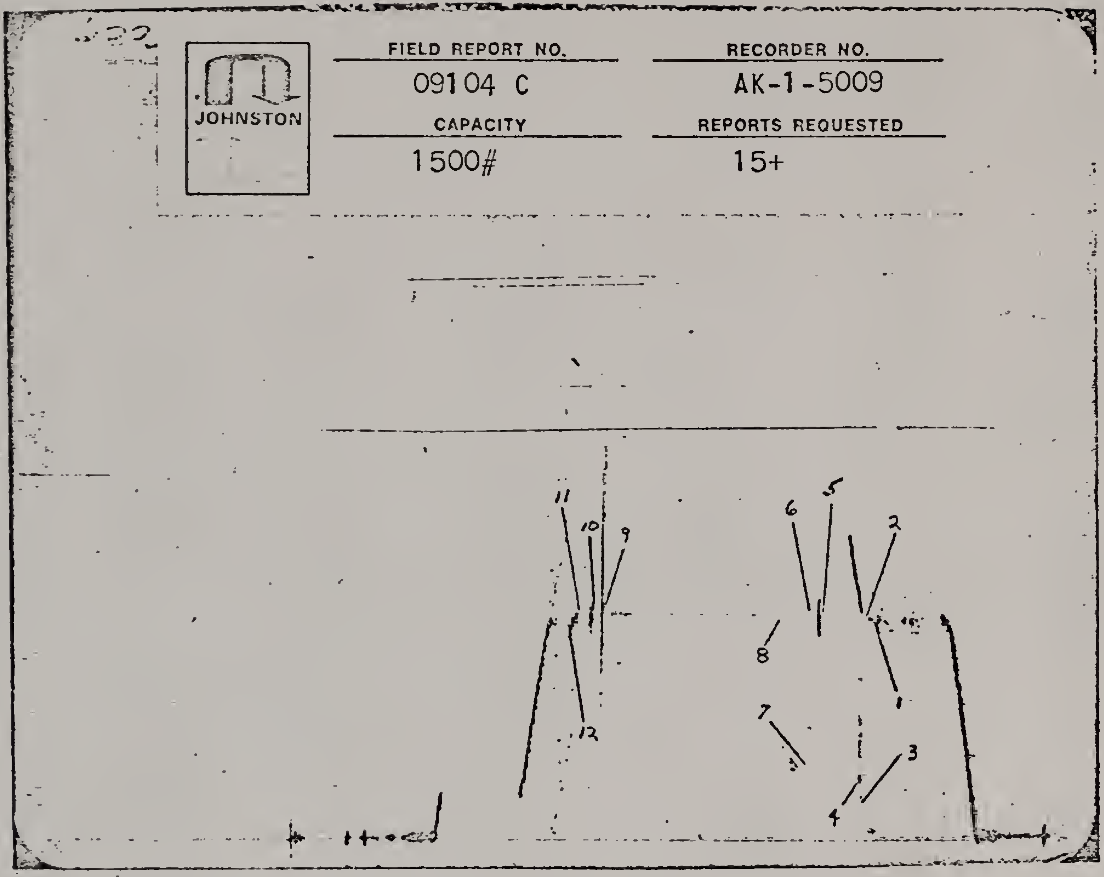
*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003421 inches per min.

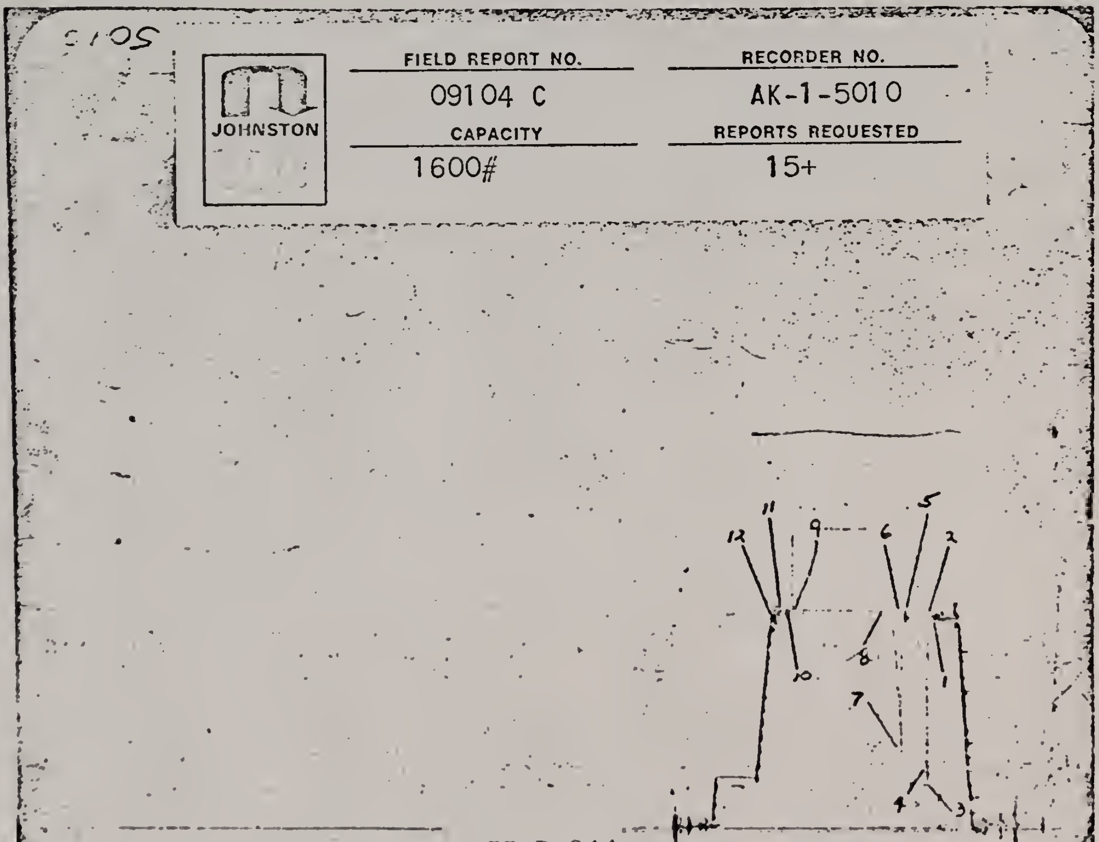
PRESSURE INCREMENTS

Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt
1	415.6		47	384.8		196	428.0	
2	416.4		48	400.8		10 197	428.0	
3 0	91.8		49	413.6		198	428.0	
1	110.3		50	416.4		199	428.0	
4 2	117.5		51	417.6		200	428.4	
3	421.6		52	419.2		201	428.4	
4	422.0		53	420.4		202	428.4	
5	422.0		54	421.2		203	428.4	
6	422.0		55	422.0		204	428.4	
7	422.4		56	422.4		205	428.4	
8	422.8		57	422.4		206	428.4	
9	422.8		58	423.2		207	428.4	
10	422.8		59	423.2		208	428.4	
11	422.8		8 60	423.6		11 209	428.4	
12	422.8		70	423.6		12	414.8	
13	422.8		80	424.0				
14	422.8		90	424.0				
15	422.8		100	424.4				
20	422.8		110	424.8				
25	423.6		120	424.8				
5 30	423.6		130	424.8				
35	425.6		140	425.6				
6 37	425.6		150	425.6				
7 38	155.9		160	425.6				
39	214.7		170	426.0				
40	232.3		180	426.0				
41	251.5		9 190	426.0				
42	283.5		191	426.4				
43	311.6		192	426.4				
44	325.2		193	428.0				
45	343.6		194	428.0				
46	363.6		195	428.0				

II B-943



FIELD REPORT NO.	RECORDER NO.
09104 C	AK-1-5009
CAPACITY	**REPORTS REQUESTED**
1500#	15+



FIELD REPORT NO.	RECORDER NO.
09104 C	AK-1-5010
CAPACITY	**REPORTS REQUESTED**
1600#	15+

DST 19

1423-1476

sperry-sun

POST OFFICE BOX 36363 HOUSTON, TEXAS 77036 (713) 494-3021

J. A. Fouché
President

January 7, 1975

Mr. Frederick R. Scheerer
Atlantic-Richfield Company
1500 Security Life Building
Denver, Colorado 80202

Dear Sir:

Enclosed is the original of our Precision Pressure Gauge Drill Stem Test Job SPG-11210-P, performed on your Federal SG-17 Well, Tract C-b, Piceance Creek Basin, Sorghum Gulch, Rio Blanco County, Colorado on December 6, 1974.

Also enclosed are the charts for gauge numbers 42 and 168 with Field Data Sheet.

Distribution is being made according to the attached mailing list.

Thank you for this opportunity to be of service.

Very truly yours,

Carl Kisinger, Jr.

Carl Kisinger, Jr.
Manager, Pressure Services

CK:jg
Enclosures

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11216-P Date Dec 6 1974 Run DST-19 Office CASPER

Customer ARCO Et Al. Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio Blanco

Well Sorghum Gulch No. 17 Field Tract - Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Truck~~	1. 1215	12/6/74	2.		
Depart: Well/~~Truck~~	1. 2031	12/6/74	2.		08:16 Hrs.
Gauge Start in Hole	1. 1227	12/6/74	2. 1237	12/6/74	
Gauge Out of Hole	1. 2031	12/6/74	2. 2006	12/6/74	08:04 Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # 42 Element # 32761 Range 1000 Time Mode 1 min.

Btm. Gauge # 168 Element # ~~[illegible]~~ 2897 Range 2500 Time Mode 1 min.

Type Tool Test Depth 1423'-1470' Zero Point Rotary Table

Packer Depth 1423 Tail Pipe Depth 1470 Top Gauge Depth 1354'

Bottom Hole Temp. 94 °F Atmos. Temp. Bottom Gauge Depth 1439'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION 1=402.5	
On Bottom	1338	12/6/74	Initial Hydrostatic ~~Mud~~	1.05
Packer Set	1410	12/6/74	Initial Draw Down	.22
Initial Open	1417	12/6/74	Initial Build-Up	1.06
Initial Shut-In	1418	12/6/74	Final Flow	.38 static 1.51
Start Flow	1455	12/6/74	Final Build-Up	
DROP ~~Final Shut-In~~ [illegible]	1725		Final Hydrostatic ~~Mud~~	
Packer Unseated			~~Mud~~ Weight	

TIME OF SURFACE NULLS

Top Gauge 1237 1238 1239 Bottom Gauge 1227 1228 1227

Remarks Lost tubing in pipe Mis-run coming out hole For new Test [illegible] To [illegible]

Don Mason
Operator

SP-423

II B-946

JOB NUMBER
SPG-11210-P

DATE OF JOB
DECEMBER 6, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 42 WITH 1000 LB. ELEMENT

GAUGE DEPTH IS 1354 FT. OUSIDE D.P.

ABOVE PACKER

TEST INTERVAL SURFACE TO 1423 FT.

SET PACKER DEPTH 1423 FT.

INITIAL HYDROSTATIC IS 395.35 PSI

FINAL HYDROSTATIC IS 399.93 PSI.

GROUND LEVEL REFERENCE IS 7036 FT.

30 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                  DATE OF JOB
SPG-11210-P                                            DECEMBER 6, 1974

GAUGE/RUN NUMBER                                            DATE OF RUN
42 RUN NO. 16   DST NO. 19                            DECEMBER 17, 1974

                                  SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                 TIME      DATE            COMMENTS
     TIME      (PSI)                  HR MIN

     0.000    394.565                 14  18 DEC 06,1974   INITIAL SHUTIN
      .017    394.680                 14  19 DEC 06,1974
      .034    394.749                 14  20 DEC 06,1974
      .052    394.819                 14  21 DEC 06,1974
      .069    394.888                 14  22 DEC 06,1974
      .086    394.957                 14  23 DEC 06,1974
      .103    395.026                 14  24 DEC 06,1974
      .121    395.072                 14  25 DEC 06,1974
      .138    395.049                 14  26 DEC 06,1974
      .155    395.118                 14  27 DEC 06,1974
      .172    395.164                 14  28 DEC 06,1974
      .190    395.164                 14  29 DEC 06,1974
      .207    395.210                 14  30 DEC 06,1974
      .224    395.210                 14  31 DEC 06,1974
      .241    395.256                 14  32 DEC 06,1974
      .259    395.325                 14  34 DEC 06,1974
      .276    395.325                 14  35 DEC 06,1974
      .293    395.394                 14  36 DEC 06,1974
      .310    395.417                 14  37 DEC 06,1974
      .328    395.440                 14  38 DEC 06,1974
      .345    395.486                 14  39 DEC 06,1974
      .362    395.555                 14  40 DEC 06,1974
      .379    395.602                 14  41 DEC 06,1974
      .397    395.625                 14  42 DEC 06,1974
      .414    395.648                 14  43 DEC 06,1974
      .431    395.694                 14  44 DEC 06,1974
      .448    395.694                 14  45 DEC 06,1974
      .466    395.717                 14  46 DEC 06,1974
      .483    395.740                 14  47 DEC 06,1974
      .500    395.855                 14  48 DEC 06,1974   END SHUTIN
```

```
                         30 POINTS REPORTED THIS RUN
```

```
JOB NUMBER                                                              DATE OF JC
SPG-11210-P                                                         DECEMBER 6, 197

GAUGE/RUN NUMBER                                                        DATE OF RU
42 RUN NO. 16  DST NO. 19                                          DECEMBER 17, 197

                                   SPERRY-SUN
                      PRECISION SUBSURFACE PRESSURE GAUGE REPORT


     DELTA    PRESSURE                       TIME      DATE             COMMENTS
     TIME      (PSI)                        HR MIN

     0.000    395.313                       14  55 DEC 06,1974     START FLOW
      .017    395.529                       14  56 DEC 06,1974
      .033    395.491                       14  57 DEC 06,1974
      .050    395.422                       14  58 DEC 06,1974
      .067    395.376                       14  59 DEC 06,1974
      .083    395.353                       15  00 DEC 06,1974
      .100    395.376                       15  01 DEC 06,1974
      .117    395.399                       15  02 DEC 06,1974
      .133    395.445                       15  03 DEC 06,1974
      .150    395.445                       15  04 DEC 06,1974
      .167    395.537                       15  05 DEC 06,1974
      .183    395.652                       15  06 DEC 06,1974
      .200    395.698                       15  07 DEC 06,1974
      .217    395.836                       15  08 DEC 06,1974
      .233    395.905                       15  09 DEC 06,1974
      .250    395.974                       15  10 DEC 06,1974
      .267    396.066                       15  11 DEC 06,1974
      .283    396.135                       15  12 DEC 06,1974
      .300    396.227                       15  13 DEC 06,1974
      .317    396.296                       15  14 DEC 06,1974
      .333    396.365                       15  15 DEC 06,1974
      .350    396.411                       15  16 DEC 06,1974
      .367    396.480                       15  17 DEC 06,1974
      .383    396.526                       15  18 DEC 06,1974
      .400    396.572                       15  19 DEC 06,1974
      .417    396.641                       15  20 DEC 06,1974
      .433    396.664                       15  21 DEC 06,1974
      .450    396.733                       15  22 DEC 06,1974
      .467    396.733                       15  23 DEC 06,1974
      .483    396.802                       15  24 DEC 06,1974
      .500    396.825                       15  25 DEC 06,1974
      .517    396.871                       15  26 DEC 06,1974
      .533    396.894                       15  27 DEC 06,1974
      .550    396.917                       15  28 DEC 06,1974
      .567    396.963                       15  29 DEC 06,1974
      .583    397.009                       15  30 DEC 06,1974
      .600    397.009                       15  31 DEC 06,1974
      .617    397.055                       15  32 DEC 06,1974
      .633    397.078                       15  33 DEC 06,1974
      .650    397.124                       15  34 DEC 06,1974
```

JOB NUMBER
SPG-11210-P

DATE OF JO
DECEMBER 6, 197

GAUGE/RUN NUMBER
42 RUN NO. 16 DST NO. 19

DATE OF RU
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.667	397.124	15	35	DEC 06,1974	
.683	397.193	15	36	DEC 06,1974	
.700	397.170	15	37	DEC 06,1974	
.717	397.216	15	38	DEC 06,1974	
.733	397.239	15	39	DEC 06,1974	
.750	397.285	15	40	DEC 06,1974	
.767	397.308	15	41	DEC 06,1974	
.783	397.331	15	42	DEC 06,1974	
.800	397.354	15	43	DEC 06,1974	
.817	397.400	15	44	DEC 06,1974	
.833	397.423	15	45	DEC 06,1974	
.850	397.400	15	46	DEC 06,1974	
.867	397.446	15	47	DEC 06,1974	
.883	397.492	15	48	DEC 06,1974	
.900	397.515	15	49	DEC 06,1974	
.917	397.515	15	50	DEC 06,1974	
.933	397.538	15	51	DEC 06,1974	
.950	397.584	15	52	DEC 06,1974	
.967	397.653	15	53	DEC 06,1974	
.983	397.630	15	54	DEC 06,1974	
1.000	397.676	15	55	DEC 06,1974	
1.017	397.676	15	56	DEC 06,1974	
1.033	397.745	15	57	DEC 06,1974	
1.050	397.745	15	58	DEC 06,1974	
1.067	397.791	15	59	DEC 06,1974	
1.083	397.791	16	00	DEC 06,1974	
1.100	397.814	16	01	DEC 06,1974	
1.117	397.837	16	02	DEC 06,1974	
1.133	397.860	16	03	DEC 06,1974	
1.150	397.952	16	04	DEC 06,1974	
1.167	397.975	16	05	DEC 06,1974	
1.183	397.975	16	06	DEC 06,1974	
1.200	397.998	16	07	DEC 06,1974	
1.217	398.021	16	08	DEC 06,1974	
1.233	398.044	16	09	DEC 06,1974	
1.250	398.067	16	10	DEC 06,1974	
1.267	398.067	16	11	DEC 06,1974	
1.283	398.090	16	12	DEC 06,1974	
1.300	398.090	16	13	DEC 06,1974	
1.317	398.136	16	14	DEC 06,1974	

JOB NUMBER
SPG-11210-P

DATE OF JC
DECEMBER 6, 197

GAUGE/RUN NUMBER
42 RUN NO. 16 DST NO. 19

DATE OF RU
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.333	398.159	16	15	DEC 06,1974	
1.350	398.182	16	16	DEC 06,1974	
1.367	398.182	16	17	DEC 06,1974	
1.383	398.228	16	18	DEC 06,1974	
1.400	398.251	16	19	DEC 06,1974	
1.417	398.251	16	20	DEC 06,1974	
1.433	398.274	16	21	DEC 06,1974	
1.450	398.297	16	22	DEC 06,1974	
1.467	398.320	16	23	DEC 06,1974	
1.483	398.343	16	24	DEC 06,1974	
1.500	398.366	16	25	DEC 06,1974	
1.517	398.389	16	26	DEC 06,1974	
1.533	398.435	16	27	DEC 06,1974	
1.550	398.435	16	28	DEC 06,1974	
1.567	375.453	16	29	DEC 06,1974	
1.583	398.458	16	30	DEC 06,1974	
1.600	398.527	16	31	DEC 06,1974	
1.617	398.527	16	32	DEC 06,1974	
1.633	398.550	16	33	DEC 06,1974	
1.650	398.573	16	34	DEC 06,1974	
1.667	398.596	16	35	DEC 06,1974	
1.683	398.619	16	36	DEC 06,1974	
1.700	398.642	16	37	DEC 06,1974	
1.717	398.642	16	38	DEC 06,1974	
1.733	398.665	16	39	DEC 06,1974	
1.750	398.665	16	40	DEC 06,1974	
1.767	398.665	16	41	DEC 06,1974	
1.783	398.734	16	42	DEC 06,1974	
1.800	398.734	16	43	DEC 06,1974	
1.817	398.734	16	44	DEC 06,1974	
1.833	398.757	16	45	DEC 06,1974	
1.850	398.826	16	46	DEC 06,1974	
1.867	398.826	16	47	DEC 06,1974	
1.883	398.826	16	48	DEC 06,1974	
1.900	398.872	16	49	DEC 06,1974	
1.917	398.849	16	50	DEC 06,1974	
1.933	398.895	16	51	DEC 06,1974	
1.950	398.941	16	52	DEC 06,1974	
1.967	398.964	16	53	DEC 06,1974	
1.983	398.964	16	54	DEC 06,1974	

JOB NUMBER
SPG-11210-P

DATE OF JC
DECEMBER 6, 197

GAUGE/RUN NUMBER
42 RUN NO, 16 DST NO, 19

DATE OF RU
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.000	399.010	16	55	DEC 06,1974	
2.017	398.987	16	56	DEC 06,1974	
2.033	399.010	16	57	DEC 06,1974	
2.050	399.079	16	58	DEC 06,1974	
2.067	399.102	16	59	DEC 06,1974	
2.083	399.125	17	00	DEC 06,1974	
2.100	399.125	17	01	DEC 06,1974	
2.117	399.148	17	02	DEC 06,1974	
2.133	399.194	17	03	DEC 06,1974	
2.150	399.148	17	04	DEC 06,1974	
2.167	399.194	17	05	DEC 06,1974	
2.183	399.217	17	06	DEC 06,1974	
2.200	399.240	17	07	DEC 06,1974	
2.217	399.286	17	08	DEC 06,1974	
2.233	399.286	17	09	DEC 06,1974	
2.250	399.332	17	10	DEC 06,1974	
2.267	399.378	17	11	DEC 06,1974	
2.283	399.355	17	12	DEC 06,1974	
2.300	399.355	17	13	DEC 06,1974	
2.317	399.378	17	14	DEC 06,1974	
2.333	399.401	17	15	DEC 06,1974	
2.350	399.401	17	16	DEC 06,1974	
2.367	399.378	17	17	DEC 06,1974	
2.383	399.470	17	18	DEC 06,1974	
2.400	399.493	17	19	DEC 06,1974	
2.417	399.516	17	20	DEC 06,1974	
2.433	399.540	17	21	DEC 06,1974	
2.450	399.540	17	22	DEC 06,1974	
2.467	399.563	17	23	DEC 06,1974	DROP 3/4 INCH

149 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-P

DATE OF JO
DECEMBER 6, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 168 WITH 2500 LB, ELEMENT.

GAUGE DEPTH IS 1439 FT. INSIDE D.P.

BELOW PACKER

TEST INTERVAL 1423 TO 1470 FT.

SET PACKER DEPTH 1423 FT.

INITIAL HYDROSTATIC IS 433.88 PSI.

GROUND LEVEL REFERENCE IS 7036 FT.

31 POINTS REPORTED THIS JOB

PAGE 1 OF 2 PAGES

```
JOB NUMBER                                                                DATE OF
SPG-11210-P                                                        DECEMBER 6, 19

GAUGE/RUN NUMBER                                                          DATE OF
168  RUN NO, 16  DST NO, 19                                       DECEMBER 17, 19

                                     SPERRY-SUN
                       PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                       TIME      DATE            COMMENTS
     TIME      (PSI)                        HR MIN

     0.000    119.791                      14  18 DEC 06,1974   INITIAL SHUTIN
      .017    412.564                      14  19 DEC 06,1974
      .033    427.205                      14  20 DEC 06,1974
      .050    434.457                      14  21 DEC 06,1974
      .067    435.302                      14  22 DEC 06,1974
      .083    436.329                      14  23 DEC 06,1974
      .100    436.680                      14  24 DEC 06,1974
      .117    436.855                      14  25 DEC 06,1974
      .133    436.913                      14  26 DEC 06,1974
      .150    437.147                      14  27 DEC 06,1974
      .167    437.206                      14  28 DEC 06,1974
      .183    437.323                      14  29 DEC 06,1974
      .200    437.440                      14  30 DEC 06,1974
      .217    437.498                      14  31 DEC 06,1974
      .233    437.557                      14  32 DEC 06,1974
      .250    437.615                      14  33 DEC 06,1974
      .267    437.674                      14  34 DEC 06,1974
      .283    437.674                      14  35 DEC 06,1974
      .300    437.732                      14  36 DEC 06,1974
      .317    437.791                      14  37 DEC 06,1974
      .333    437.791                      14  38 DEC 06,1974
      .350    437.849                      14  39 DEC 06,1974
      .367    437.966                      14  40 DEC 06,1974
      .383    437.966                      14  41 DEC 06,1974
      .400    437.966                      14  42 DEC 06,1974
      .417    438.025                      14  43 DEC 06,1974
      .433    438.083                      14  44 DEC 06,1974
      .450    438.025                      14  45 DEC 06,1974
      .467    438.142                      14  46 DEC 06,1974
      .483    438.142                      14  47 DEC 06,1974
      .500    438.259                      14  48 DEC 06,1974   END SHUTIN
```

```
                          31 POINTS REPORTED THIS RUN

                                   PAGE  2
```

GAUGE/RUN NUMBER DATE OF R
163 RUN NC, 16 DST NO, 19 DECEMBER 17, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0,000	195.878	14	55	DEC 06,1974	START FLOW
.017	224,576	14	56	DEC 06,1974	
.034	251,123	14	57	DEC 06,1974	
.050	277,095	14	58	DEC 06,1974	
.067	299,670	14	59	DEC 06,1974	
.084	320,543	15	00	DEC 06,1974	
.101	339,370	15	01	DEC 06,1974	
.117	355,153	15	02	DEC 06,1974	
.134	369,423	15	03	DEC 06,1974	
.151	382.114	15	04	DEC 06,1974	
.168	393,235	15	05	DEC 06,1974	
.185	402,759	15	06	DEC 06,1974	
.201	410,596	15	07	DEC 06,1974	
.218	416,737	15	08	DEC 06,1974	
.235	421.825	15	09	DEC 06,1974	
.252	426,035	15	10	DEC 06,1974	
.268	429,252	15	11	DEC 06,1974	
.285	431,708	15	12	DEC 06,1974	
.302	433,404	15	13	DEC 06,1974	
.319	434,750	15	14	DEC 06,1974	
.336	435,685	15	15	DEC 06,1974	
.352	436,270	15	16	DEC 06,1974	
.369	436,796	15	17	DEC 06,1974	
.386	437,147	15	18	DEC 06,1974	
.403	437,440	15	19	DEC 06,1974	
.420	437,674	15	20	DEC 06,1974	
.436	437,791	15	21	DEC 06,1974	
.453	437,908	15	22	DEC 06,1974	
.470	438,025	15	23	DEC 06,1974	
.487	438,142	15	24	DEC 06,1974	
.503	438.200	15	25	DEC 06,1974	
.520	438.200	15	26	DEC 06,1974	
.537	438,259	15	27	DEC 06,1974	
.554	438,434	15	28	DEC 06,1974	
.571	438.434	15	29	DEC 06,1974	
.587	438,493	15	30	DEC 06,1974	
.604	438,493	15	31	DEC 06,1974	
.621	438.609	15	32	DEC 06,1974	
.638	438,609	15	33	DEC 06,1974	
.654	438,551	15	34	DEC 06,1974	

```
JOB NUMBER                                                             DATE OF
SPG-11210-P                                                     DECEMBER 6, 19

GAUGE/RUN NUMBER                                                       DATE OF R
168 RUN NO. 16    DST NO. 19                                   DECEMBER 17, 19

                                  SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                         TIME      DATE              COMMENTS
     TIME      (PSI)                          HR MIN

      .671    438.726                         15  35 DEC 06,1974
      .688    438.726                         15  36 DEC 06,1974
      .705    438.668                         15  37 DEC 06,1974
      .722    438.785                         15  38 DEC 06,1974
      .738    438.785                         15  39 DEC 06,1974
      .755    438.843                         15  40 DEC 06,1974
      .772    438.902                         15  41 DEC 06,1974
      .789    438.843                         15  42 DEC 06,1974
      .805    438.843                         15  43 DEC 06,1974
      .822    438.960                         15  44 DEC 06,1974
      .839    438.960                         15  45 DEC 06,1974
      .856    438.960                         15  46 DEC 06,1974
      .873    439.019                         15  47 DEC 06,1974
      .889    439.019                         15  48 DEC 06,1974
      .906    439.019                         15  49 DEC 06,1974
      .923    439.077                         15  50 DEC 06,1974
      .940    439.077                         15  51 DEC 06,1974
      .956    439.136                         15  52 DEC 06,1974
      .973    439.077                         15  53 DEC 06,1974
      .990    439.194                         15  54 DEC 06,1974
     1.007    439.194                         15  55 DEC 06,1974
     1.024    439.311                         15  56 DEC 06,1974
     1.040    439.253                         15  57 DEC 06,1974
     1.057    439.253                         15  58 DEC 06,1974
     1.074    439.311                         15  59 DEC 06,1974
     1.091    439.370                         16  00 DEC 06,1974
     1.107    439.370                         16  01 DEC 06,1974
     1.124    439.487                         16  02 DEC 06,1974
     1.141    439.487                         16  03 DEC 06,1974
     1.158    439.487                         16  04 DEC 06,1974
     1.175    439.487                         16  05 DEC 06,1974
     1.191    439.487                         16  06 DEC 06,1974
     1.208    439.487                         16  07 DEC 06,1974
     1.225    439.487                         16  08 DEC 06,1974
     1.242    439.545                         16  10 DEC 06,1974
     1.259    439.545                         16  11 DEC 06,1974
     1.275    439.545                         16  12 DEC 06,1974
     1.292    439.604                         16  13 DEC 06,1974
     1.309    439.545                         16  14 DEC 06,1974
     1.326    439.662                         16  15 DEC 06,1974
```

```
JOB NUMBER                                                        DATE OF J
SPG-11210-P                                                   DECEMBER 6, 197

GAUGE/RUN NUMBER                                                  DATE OF R
163 RUN NO. 16    DST NO. 19                                 DECEMBER 17, 197

                                 SPERRY-SUN
                   PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE                     TIME      DATE                  COMMENTS
   TIME      (PSI)                      HR MIN

   1.342    439.662                     16  16 DEC 06,1974
   1.359    439.662                     16  17 DEC 06,1974
   1.376    439.662                     16  18 DEC 06,1974
   1.393    439.721                     16  19 DEC 06,1974
   1.410    439.779                     16  20 DEC 06,1974
   1.426    439.779                     16  21 DEC 06,1974
   1.443    439.721                     16  22 DEC 06,1974
   1.460    439.779                     16  23 DEC 06,1974
   1.477    439.721                     16  24 DEC 06,1974
   1.493    439.779                     16  25 DEC 06,1974
   1.510    439.838                     16  26 DEC 06,1974
   1.527    439.838                     16  27 DEC 06,1974
   1.544    439.838                     16  28 DEC 06,1974
   1.561    439.838                     16  29 DEC 06,1974
   1.577    439.838                     16  30 DEC 06,1974
   1.594    439.838                     16  31 DEC 06,1974
   1.611    439.838                     16  32 DEC 06,1974
   1.628    439.838                     16  33 DEC 06,1974
   1.644    439.896                     16  34 DEC 06,1974
   1.661    439.896                     16  35 DEC 06,1974
   1.678    439.896                     16  36 DEC 06,1974
   1.695    439.955                     16  37 DEC 06,1974
   1.712    439.955                     16  38 DEC 06,1974
   1.728    439.955                     16  39 DEC 06,1974
   1.745    439.955                     16  40 DEC 06,1974
   1.762    439.955                     16  41 DEC 06,1974
   1.779    440.013                     16  42 DEC 06,1974
   1.795    440.072                     16  43 DEC 06,1974
   1.812    440.013                     16  44 DEC 06,1974
   1.829    440.130                     16  45 DEC 06,1974
   1.846    440.130                     16  46 DEC 06,1974
   1.863    440.013                     16  47 DEC 06,1974
   1.879    440.130                     16  48 DEC 06,1974
   1.896    440.130                     16  49 DEC 06,1974
   1.913    440.189                     16  50 DEC 06,1974
   1.930    440.130                     16  51 DEC 06,1974
   1.946    440.130                     16  52 DEC 06,1974
   1.963    440.130                     16  53 DEC 06,1974
   1.980    440.130                     16  54 DEC 06,1974
   1.997    440.189                     16  55 DEC 06,1974
```

JOB NUMBER
SPG-11210-P

DATE OF J
DECEMBER 6, 197

GAUGE/RUN NUMBER
163 RUN NO, 16   DST NO, 19

DATE OF RL
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2,014	440.247	16	56	DEC 06,1974	
2,030	440,247	16	57	DEC 06,1974	
2,047	440.306	16	58	DEC 06,1974	
2,064	440,306	16	59	DEC 06,1974	
2,081	440,306	17	00	DEC 06,1974	
2,098	440.306	17	01	DEC 06,1974	
2,114	440,306	17	02	DEC 06,1974	
2,131	440,364	17	03	DEC 06,1974	
2,148	440.306	17	04	DEC 06,1974	
2,165	440,306	17	05	DEC 06,1974	
2,181	440.364	17	06	DEC 06,1974	
2,198	440.356	17	07	DEC 06,1974	
2.215	440,364	17	08	DEC 06,1974	
2.232	440,356	17	09	DEC 06,1974	
2.249	440,949	17	10	DEC 06,1974	
2.265	441,060	17	11	DEC 06,1974	
2,282	440,632	17	12	DEC 06,1974	
2,299	440,390	17	13	DEC 06,1974	
2,316	441,241	17	14	DEC 06,1974	
2,332	440,949	17	15	DEC 06,1974	
2,349	441,007	17	16	DEC 06,1974	
2,366	441,133	17	17	DEC 06,1974	
2,383	441,358	17	18	DEC 06,1974	
2,400	440,949	17	19	DEC 06,1974	
2,416	441,133	17	20	DEC 06,1974	
2.433	440,832	17	21	DEC 06,1974	
2,450	441,007	17	22	DEC 06,1974	
2,467	440,890	17	23	DEC 06,1974	DROP 3/4INCH

148 POINTS REPORTED THIS RUN

JOHNSTON

Schlumberger

technical report

RECEIVED

DEC 1 9 1974

A. J. ROGERS

II B-959

F.R. # 09105 C

COMPANY ATLANTIC-RICHFIELD COMPANY

WELL FEDERAL S.G. #17

TEST NO. 20

COUNTY RIO BLANCO

STATE COLORADO

JOHNSTON
...found a better way

SURFACE INFORMATION

ription (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool (12-6-74)	2241	-	-
(12-7-74)			
INJECTED WATER, 2 GAL/MIN	0315	-	-
STOPPED INJECTING	0335	-	-
INJECTED WATER, 5 GAL/MIN	0340	-	-
STOPPED INJECTING	0405	-	-
INJECTED WATER, 10 GAL/MIN	0410	-	-
STOPPED INJECTING	0430	-	-
INJECTED WATER, 20 GAL/MIN	0435	-	-
STOPPED INJECTING	0455	-	-
INJECTED WATER, 40 GAL/MIN	0500	-	-
STOPPED INJECTING	0503	-	-
DECREASED INJECTION			
INJECTED WATER, 27 GAL/MIN	0504	-	-
STOPPED INJECTING	0515	-	-
CYCLED TOOL	0636	-	-
INJECTED 60 GAL/MIN			
CYCLED TOOL	0643	-	-
RE-CYCLED TOOL	0653	-	-
RE-OPENED TOOL	0705	-	-
CLOSED FOR FINAL SHUT-IN	0733	-	-
PULLED PACKER LOOSE	0745	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M. F. E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 47 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1470 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1080' I.D. -
Packer Depth(s) 1417 & 1423 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	___ @ ___ °F.	___ ppm
Recovery Mud	___ @ ___ °F.	
Recovery Mud Filtrate	___ @ ___ °F.	___ ppm
Mud Pit Sample	___ @ ___ °F.	
Mud Pit Sample Filtrate	___ @ ___ °F.	___ ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING; 1600 GLENARM; DENVER, COLORADO 80202
mpany ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S.G. #17 Location 436'FWL-181'FSL-SEC.16-3S-96W
Test Interval 1423' TO 1470' Test # 20 Date 12-6-74
II B-960
County RIO BLANCO State COLORADO Field Report No. 09105 C
Technician TAYLOR(VERNAL) Test Approved By MR. S. W. BERKHEISER, JR. No. Reports Requested 15 (14x's

PRESSURE DATA

Instrument No.	AK-1-5010		
Capacity (P.S.I.G.)	1600		
Instrument Depth	1432'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	-		
Initial Hydrastatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrastatic Mud F			

Field Report No. 09105 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

INSTRUMENT NUMBER AK-1-5009; NO PRESSURES RECORDED DUE TO MALFUNCTION OF INSTRUMENT.

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003476 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1		417.6			111	384.8			220	422.8	
2		422.4			112	386.8			225	422.8	
3	0	72.3			113	387.2			230	423.2	
4	3	149.9			114	387.6			235	423.2	
	4	186.7			115	387.6			240	423.2	
	5	238.7			120	387.6			245	423.3	
	6	239.5			125	388.0			250	423.3	
	7	265.5			130	388.0			255	423.3	
	8	274.7			135	388.0			260	423.3	
	9	298.3			140	388.0			265	423.3	
	10	317.9			145	388.0			270	423.3	
	11	339.2			150	387.6			275	423.3	
	12	350.0			155	386.4		10	278	423.3	
	13	362.8			160	387.9			280	423.3	
	14	372.8		8	164	387.9			282	423.3	
	15	382.4		9	167	360.8			284	423.3	
	16	394.0			168	388.8			286	423.3	
	17	400.4			169	396.8			288	428.8	
	18	403.2			170	404.8			290	429.2	
	19	407.6			171	410.0			292	429.2	
	20	412.0			172	412.8			294	429.6	
	30	421.2			173	415.2			296	429.6	
	40	422.0			174	417.2		11	298	429.6	
	50	422.0			175	418.4			300	429.6	
	60	422.0			176	419.2			302	428.0	
	70	422.8			177	419.6		12	303	426.0	
	80	422.8			178	420.0			304	428.8	
	90	423.2			179	420.4			306	433.2	
	100	423.2			180	420.8	II B-961		308	435.2	
5	106	423.2			190	422.0			310	436.4	
6	108	449.6			200	422.4			312	437.2	
7	110	383.2			210	422.8			314	438.0	

PRESSURE DATA

Instrument No.		AK-1-5010		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09105 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

Shut in pressure did not reach static reservoir pressure.

Clock Travel ________ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	(T + Δt)/Δt	Point Minutes	Pressure	(T + Δt)/Δt	Point Minutes	Pressure	(T + Δt)/Δt
316	438.0		376	522.9		440	428.8	
318	438.4		18 378	474.8		442	429.6	
320	438.4		380	499.6		444	429.6	
322	438.4		382	557.7		446	430.0	
324	438.4		384	578.1		448	430.4	
13 326	438.4		386	585.7		450	430.4	
328	431.6		388	590.5		452	430.4	
14 330	428.8		390	592.5		454	430.4	
332	444.0		392	596.1		456	430.4	
334	451.2		394	599.3		458	430.4	
336	456.4		19 395	606.1		460	430.8	
338	460.0		396	570.5		462	431.2	
340	462.8		398	552.1		464	431.2	
342	466.0		400	538.1		468	431.2	
344	467.2		402	521.7		470	431.6	
346	469.2		404	511.3		472	431.6	
348	470.0		406	497.2		474	432.0	
15 349	471.2		408	472.0		21 476	432.0	
350	465.2		410	465.2		478	433.6	
352	458.4		412	568.5		480	432.8	
354	450.4		20 416	430.4		482	432.4	
16 355	440.4		418	429.6		484	435.2	
356	458.8		420	429.2		486	433.2	
358	470.8		422	429.2		488	432.8	
360	482.8		424	429.2		490	432.4	
362	489.6		426	429.2		492	432.0	
364	501.3		428	428.8		494	434.0	
366	507.7		430	428.8		496	432.8	
368	512.9		432	428.8		498	432.4	
370	517.3		434	428.8		500	432.4	
372	522.1		436	428.8		502	432.4	
17 374	543.7		438	428.8		504	432.4	

II B-962

PRESSURE DATA

Instrument No.		AK-1-5010		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09105 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

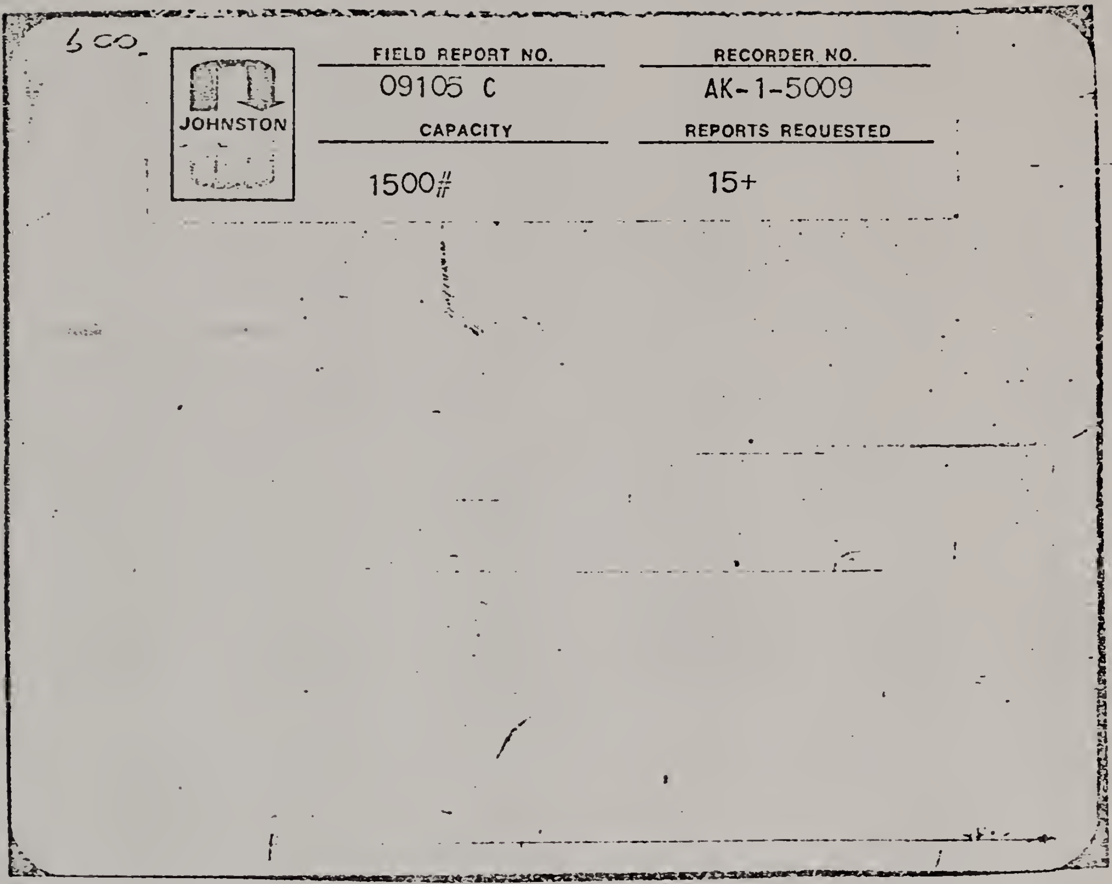
Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

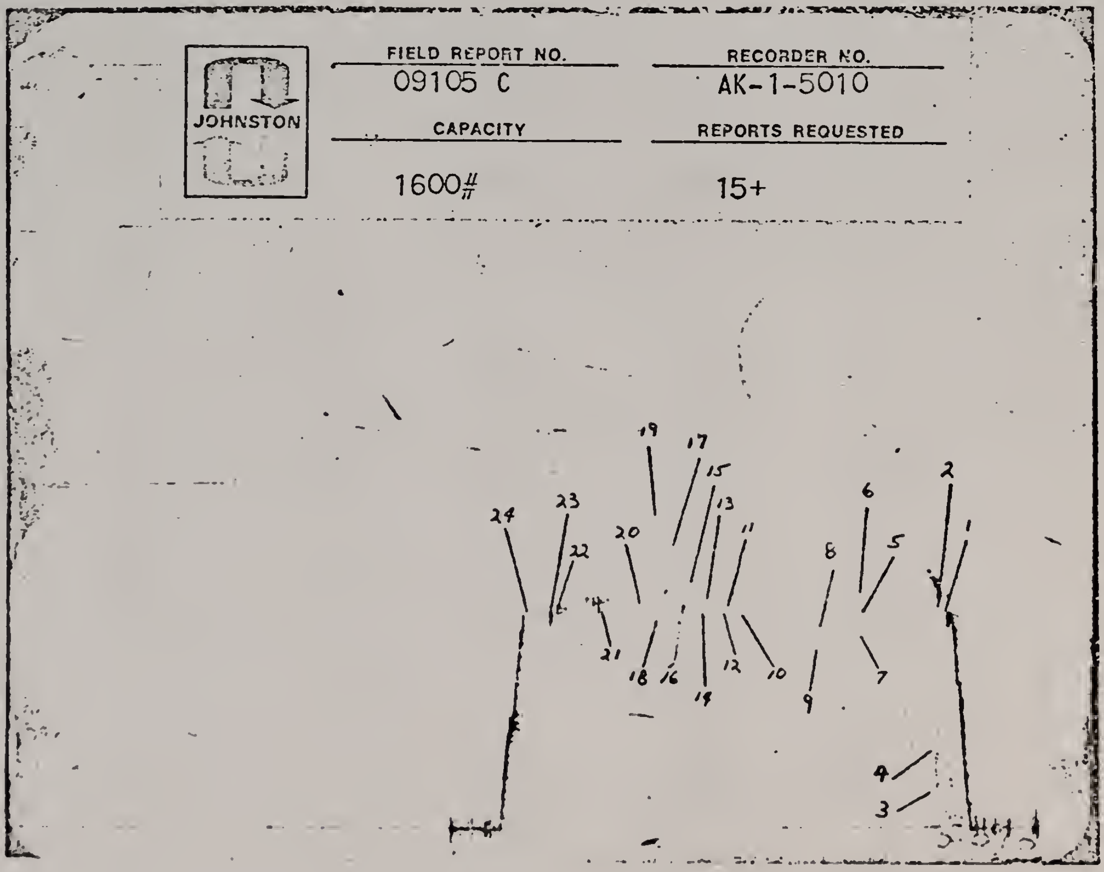
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
506	432.0							
508	432.0							
510	432.0							
512	431.6							
514	431.6							
516	431.6							
518	431.6							
520	431.6							
522	431.6							
524	431.6							
526	431.6							
528	431.6							
530	431.6							
532	430.4							
534	429.6							
22 535	429.2							
536	429.2							
538	429.2							
540	428.8							
542	428.8							
23 544	428.8							
24	416.0							



600.

FIELD REPORT NO.	RECORDER NO.
09105 C	AK-1-5009
CAPACITY	**REPORTS REQUESTED**
1500#	15+



FIELD REPORT NO.	RECORDER NO.
09105 C	AK-1-5010
CAPACITY	**REPORTS REQUESTED**
1600#	15+

DST 20

1423 - 1470

sperry-sun

POST OFFICE BOX 36363 HOUSTON, TEXAS 77036 (713) 494-3021

J. A. Fouché
President

January 7, 1975

Mr. Frederick R. Scheerer
Atlantic-Richfield Company
1500 Security Life Building
Denver, Colorado 80202

Dear Sir:

Enclosed is the original of our Precision Pressure Gauge Drill Stem Test Job SPG-11210-Q, performed on your Federal SG-17 Well, Tract C-b, Piceance Creek Basin, Sorghum Gulch, Rio Blanco County, Colorado on December 6, 1974.

Also enclosed are the charts for gauge numbers 42 and 168 with Field Data Sheet.

Distribution is being made according to the attached mailing list.

Thank you for this opportunity to be of service.

Very truly yours,

Carl Kisinger, Jr.

Carl Kisinger, Jr.
Manager, Pressure Services

CK:jg
Enclosures

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210Q Date December 7, 1974 Run #1 Office CASPER

Customer ARCO Et AL Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio BLANCO

Well Sorghum Gulch No. 17 Field Tract Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 2031	12/6/74	2.		
Depart: Well/~~Dock~~	1. 1030	12/7/74	2.		1359 Hrs.
Gauge Start in Hole	1. 2054	12/6/74	2. 2105	12/6/74	
Gauge Out of Hole	1. 1016	12/7/74	2. 0944	12/7/74	1322 Hrs.

No. Trips 0 Miles 0 Total Mileage SPG-11210P ON LOCATION

Top Gauge # 42 Element # 32761 Range 1000 lbs. Time Mode 1 min

Btm. Gauge # 168 Element # 2897 Range 2500 lbs. Time Mode 1 min

Type Tool ______ Test Depth 1423'-1470' Zero Point Rotary Table

Packer Depth 1423' Tail Pipe Depth 1470' Top Gauge Depth 1354'

Bottom Hole Temp. 94°F Atmos. Temp. 29°F Bottom Gauge Depth 1439'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION 1 = 402.5	
On Bottom	2220	12/6/74	Initial Hydrostatic ~~Mud~~	1.04
Packer Set	2223	12/6/74	Initial Draw Down	—
Initial Open	2242	12/6/74	Initial Build-Up	.15 STATIC 1.495
Initial Shut-In	—	—	Final Flow	~~[illegible]~~
Start Flow	—	—	Final Build-Up	—
Final Shut-In	0733	12/7/74	Final Hydrostatic ~~Mud~~	1.08
Packer Unseated	0745	12/7/74	~~Mud Weight~~	—

TIME OF SURFACE NULLS

Bottom ~~Top~~ Gauge 2054 2055 2056 Top ~~Bottom~~ Gauge 2105 2106 2107

Remarks Pick up Test After the Recovery Test

SP-423

II B-966

Don Mason
Operator

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 42 WITH 1000 LB. ELEMENT.

GAUGE LOCATED OUTSIDE D.P. IN ANNULUS ABOVE PACKER

DEPTH OF GAUGE IS 1354 FT.

TEST INTERVAL SURFACE TO 1423 FT.

SET PACKER DEPTH IS 1423 FT.

INITIAL HYDROSTATIC IS 402.64 PSI

FINAL HYDROSTATIC IS 394.91 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

532 POINTS REPORTED THIS JOB

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	402.439	22	42	DEC 06,1974	START FLOW
.017	402.141	22	43	DEC 06,1974	
.033	401.935	22	44	DEC 06,1974	
.050	401.844	22	45	DEC 06,1974	
.067	401.775	22	46	DEC 06,1974	
.083	401.729	22	47	DEC 06,1974	
.100	401.684	22	48	DEC 06,1974	
.117	401.661	22	49	DEC 06,1974	
.133	401.661	22	50	DEC 06,1974	
.150	401.661	22	51	DEC 06,1974	
.167	401.569	22	52	DEC 06,1974	
.183	401.729	22	53	DEC 06,1974	
.200	401.798	22	54	DEC 06,1974	
.217	401.867	22	55	DEC 06,1974	
.233	401.935	22	56	DEC 06,1974	
.250	401.981	22	57	DEC 06,1974	
.267	402.096	22	58	DEC 06,1974	
.283	402.141	22	59	DEC 06,1974	
.300	402.233	23	00	DEC 06,1974	
.317	402.279	23	01	DEC 06,1974	
.333	402.324	23	02	DEC 06,1974	
.350	402.370	23	03	DEC 06,1974	
.367	402.416	23	04	DEC 06,1974	
.383	402.485	23	05	DEC 06,1974	
.400	402.508	23	06	DEC 06,1974	
.417	402.553	23	07	DEC 06,1974	
.433	402.576	23	08	DEC 06,1974	
.450	402.599	23	09	DEC 06,1974	
.467	402.622	23	10	DEC 06,1974	
.483	402.645	23	11	DEC 06,1974	
.500	402.645	23	12	DEC 06,1974	
.517	402.668	23	13	DEC 06,1974	
.533	402.691	23	14	DEC 06,1974	
.550	402.691	23	15	DEC 06,1974	
.567	402.759	23	16	DEC 06,1974	
.583	402.759	23	17	DEC 06,1974	
.600	402.759	23	18	DEC 06,1974	
.617	402.805	23	19	DEC 06,1974	
.633	402.782	23	20	DEC 06,1974	
.650	402.782	23	21	DEC 06,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.667	402.828	23	22	DEC 06,1974	
.683	402.828	23	23	DEC 06,1974	
.700	402.828	23	24	DEC 06,1974	
.717	402.828	23	25	DEC 06,1974	
.733	402.828	23	26	DEC 06,1974	
.750	402.828	23	27	DEC 06,1974	
.767	402.874	23	28	DEC 06,1974	
.783	402.897	23	29	DEC 06,1974	
.800	402.920	23	30	DEC 06,1974	
.817	402.920	23	31	DEC 06,1974	
.833	402.920	23	32	DEC 06,1974	
.850	402.943	23	33	DEC 06,1974	
.867	402.943	23	34	DEC 06,1974	
.883	402.943	23	35	DEC 06,1974	
.900	402.988	23	36	DEC 06,1974	
.917	402.988	23	37	DEC 06,1974	
.933	402.965	23	38	DEC 06,1974	
.950	402.988	23	39	DEC 06,1974	
.967	402.988	23	40	DEC 06,1974	
.983	402.988	23	41	DEC 06,1974	
1.000	402.988	23	42	DEC 06,1974	
1.017	402.988	23	43	DEC 06,1974	
1.033	403.080	23	44	DEC 06,1974	
1.050	403.080	23	45	DEC 06,1974	
1.067	403.080	23	46	DEC 06,1974	
1.083	403.080	23	47	DEC 06,1974	
1.100	403.080	23	48	DEC 06,1974	
1.117	403.103	23	49	DEC 06,1974	
1.133	403.103	23	50	DEC 06,1974	
1.150	403.149	23	51	DEC 06,1974	
1.167	403.149	23	52	DEC 06,1974	
1.183	403.149	23	53	DEC 06,1974	
1.200	403.149	23	54	DEC 06,1974	
1.217	403.149	23	55	DEC 06,1974	
1.233	403.171	23	56	DEC 06,1974	
1.250	403.171	23	57	DEC 06,1974	
1.267	403.171	23	58	DEC 06,1974	
1.283	403.194	23	59	DEC 06,1974	
1.300	403.194	00	00	DEC 07,1974	
1.317	403.217	00	01	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JO
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.000	403.080	00	42	DEC 07,1974	
2.017	403.057	00	43	DEC 07,1974	
2.033	403.080	00	44	DEC 07,1974	
2.050	403.080	00	45	DEC 07,1974	
2.067	403.080	00	46	DEC 07,1974	
2.083	403.080	00	47	DEC 07,1974	
2.100	403.080	00	48	DEC 07,1974	
2.117	403.080	00	49	DEC 07,1974	
2.133	403.080	00	50	DEC 07,1974	
2.150	403.080	00	51	DEC 07,1974	
2.167	403.080	00	52	DEC 07,1974	
2.183	403.126	00	53	DEC 07,1974	
2.200	403.126	00	54	DEC 07,1974	
2.217	403.080	00	55	DEC 07,1974	
2.233	403.103	00	56	DEC 07,1974	
2.250	403.103	00	57	DEC 07,1974	
2.267	403.103	00	58	DEC 07,1974	
2.283	403.103	00	59	DEC 07,1974	
2.300	403.103	01	00	DEC 07,1974	
2.317	403.103	01	01	DEC 07,1974	
2.333	403.103	01	02	DEC 07,1974	
2.350	403.126	01	03	DEC 07,1974	
2.367	403.126	01	04	DEC 07,1974	
2.383	403.126	01	05	DEC 07,1974	
2.400	403.149	01	06	DEC 07,1974	
2.417	403.149	01	07	DEC 07,1974	
2.433	403.149	01	08	DEC 07,1974	
2.450	403.149	01	09	DEC 07,1974	
2.467	403.149	01	10	DEC 07,1974	
2.483	403.149	01	11	DEC 07,1974	
2.500	403.171	01	12	DEC 07,1974	
2.517	403.171	01	13	DEC 07,1974	
2.533	403.171	01	14	DEC 07,1974	
2.550	403.149	01	15	DEC 07,1974	
2.567	403.171	01	16	DEC 07,1974	
2.583	403.171	01	17	DEC 07,1974	
2.600	403.171	01	18	DEC 07,1974	
2.617	403.171	01	19	DEC 07,1974	
2.633	403.240	01	20	DEC 07,1974	
2.650	403.240	01	21	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JO
DECEMBER 6, 197

GAUGE/RUN NUMBER
42 RUN NO. 17   DST NO. 20

DATE OF RU
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.333	403.217	00	02	DEC 07,1974	
1.350	403.217	00	03	DEC 07,1974	
1.367	403.217	00	04	DEC 07,1974	
1.383	403.263	00	05	DEC 07,1974	
1.400	403.263	00	06	DEC 07,1974	
1.417	403.263	00	07	DEC 07,1974	
1.433	403.263	00	08	DEC 07,1974	
1.450	403.263	00	09	DEC 07,1974	
1.467	403.332	00	10	DEC 07,1974	
1.483	403.332	00	11	DEC 07,1974	
1.500	403.332	00	12	DEC 07,1974	
1.517	403.332	00	13	DEC 07,1974	
1.533	403.332	00	14	DEC 07,1974	
1.550	403.332	00	15	DEC 07,1974	
1.567	403.332	00	16	DEC 07,1974	
1.583	403.377	00	17	DEC 07,1974	
1.600	403.377	00	18	DEC 07,1974	
1.617	403.377	00	19	DEC 07,1974	
1.633	403.423	00	20	DEC 07,1974	
1.650	403.217	00	21	DEC 07,1974	
1.667	403.400	00	22	DEC 07,1974	
1.683	403.400	00	23	DEC 07,1974	
1.700	403.400	00	24	DEC 07,1974	
1.717	403.400	00	25	DEC 07,1974	START JETTING
1.733	403.423	00	26	DEC 07,1974	
1.750	403.469	00	27	DEC 07,1974	
1.767	403.469	00	28	DEC 07,1974	
1.783	403.355	00	29	DEC 07,1974	
1.800	403.286	00	30	DEC 07,1974	
1.817	403.217	00	31	DEC 07,1974	
1.833	403.171	00	32	DEC 07,1974	
1.850	403.171	00	33	DEC 07,1974	
1.867	403.126	00	34	DEC 07,1974	
1.883	403.126	00	35	DEC 07,1974	
1.900	403.126	00	36	DEC 07,1974	
1.917	403.080	00	37	DEC 07,1974	
1.933	403.080	00	38	DEC 07,1974	
1.950	403.080	00	39	DEC 07,1974	
1.967	403.080	00	40	DEC 07,1974	
1.983	403.080	00	41	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17   DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.667	403.240	01	22	DEC 07,1974	
2.683	403.240	01	23	DEC 07,1974	
2.700	403.263	01	24	DEC 07,1974	
2.717	403.240	01	25	DEC 07,1974	END JETTING
2.733	403.194	01	26	DEC 07,1974	
2.750	403.194	01	27	DEC 07,1974	
2.767	403.240	01	28	DEC 07,1974	
2.783	403.263	01	29	DEC 07,1974	
2.800	403.309	01	30	DEC 07,1974	
2.817	403.377	01	31	DEC 07,1974	
2.833	403.446	01	32	DEC 07,1974	
2.850	403.492	01	33	DEC 07,1974	
2.867	403.538	01	34	DEC 07,1974	
2.883	403.606	01	35	DEC 07,1974	
2.900	403.675	01	36	DEC 07,1974	
2.917	403.675	01	37	DEC 07,1974	
2.933	403.698	01	38	DEC 07,1974	
2.950	403.744	01	39	DEC 07,1974	
2.967	403.767	01	40	DEC 07,1974	
2.983	403.767	01	41	DEC 07,1974	
3.000	403.767	01	42	DEC 07,1974	
3.017	403.812	01	43	DEC 07,1974	
3.033	403.858	01	44	DEC 07,1974	
3.050	403.904	01	45	DEC 07,1974	
3.067	403.904	01	46	DEC 07,1974	
3.083	403.904	01	47	DEC 07,1974	
3.100	403.927	01	48	DEC 07,1974	
3.117	403.927	01	49	DEC 07,1974	
3.133	403.996	01	50	DEC 07,1974	
3.150	403.950	01	51	DEC 07,1974	
3.167	403.950	01	52	DEC 07,1974	
3.183	403.996	01	53	DEC 07,1974	
3.200	403.996	01	54	DEC 07,1974	
3.217	403.996	01	55	DEC 07,1974	
3.233	404.018	01	56	DEC 07,1974	
3.250	404.018	01	57	DEC 07,1974	
3.267	404.064	01	58	DEC 07,1974	
3.283	404.064	01	59	DEC 07,1974	
3.300	404.064	02	00	DEC 07,1974	
3.317	404.064	02	01	DEC 07,1974	

```
JOB NUMBER                                                          DATE OF JOB
SPG 11210 Q                                                    DECEMBER 6, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
42 RUN NO. 17   DST NO. 20                                    DECEMBER 17, 1974

                                  SPERRY-SUN
                   PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                 TIME     DATE               COMMENTS
    TIME      (PSI)                  HR MIN

    3.333    404.110                 02  02 DEC 07,1974
    3.350    404.110                 02  03 DEC 07,1974
    3.367    404.110                 02  04 DEC 07,1974
    3.383    404.110                 02  05 DEC 07,1974
    3.400    404.110                 02  06 DEC 07,1974
    3.417    404.110                 02  07 DEC 07,1974
    3.433    404.110                 02  08 DEC 07,1974
    3.450    404.156                 02  09 DEC 07,1974
    3.467    404.156                 02  10 DEC 07,1974
    3.483    404.156                 02  11 DEC 07,1974
    3.500    404.156                 02  12 DEC 07,1974
    3.517    404.156                 02  13 DEC 07,1974
    3.533    404.202                 02  14 DEC 07,1974
    3.550    404.202                 02  15 DEC 07,1974
    3.567    404.202                 02  16 DEC 07,1974
    3.583    404.202                 02  17 DEC 07,1974
    3.600    404.202                 02  18 DEC 07,1974
    3.617    404.224                 02  19 DEC 07,1974
    3.633    404.270                 02  20 DEC 07,1974
    3.650    404.270                 02  21 DEC 07,1974
    3.667    404.270                 02  22 DEC 07,1974
    3.683    404.270                 02  23 DEC 07,1974
    3.700    404.270                 02  24 DEC 07,1974
    3.717    404.270                 02  25 DEC 07,1974
    3.733    404.270                 02  26 DEC 07,1974
    3.750    404.316                 02  27 DEC 07,1974
    3.767    404.316                 02  28 DEC 07,1974
    3.783    404.316                 02  29 DEC 07,1974
    3.800    404.316                 02  30 DEC 07,1974
    3.817    404.316                 02  31 DEC 07,1974
    3.833    404.362                 02  32 DEC 07,1974
    3.850    404.362                 02  33 DEC 07,1974
    3.867    404.362                 02  34 DEC 07,1974
    3.883    404.362                 02  35 DEC 07,1974
    3.900    404.362                 02  36 DEC 07,1974
    3.917    404.362                 02  37 DEC 07,1974
    3.933    404.362                 02  38 DEC 07,1974
    3.950    404.362                 02  39 DEC 07,1974
    3.967    404.430                 02  40 DEC 07,1974
    3.983    404.430                 02  41 DEC 07,1974
```

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17   DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.000	404.430	02	42	DEC 07,1974	
4.017	404.408	02	43	DEC 07,1974	
4.033	404.408	02	44	DEC 07,1974	
4.050	404.408	02	45	DEC 07,1974	
4.067	404.430	02	46	DEC 07,1974	
4.083	404.453	02	47	DEC 07,1974	
4.100	404.453	02	48	DEC 07,1974	
4.117	404.453	02	49	DEC 07,1974	
4.133	404.453	02	50	DEC 07,1974	
4.150	404.499	02	51	DEC 07,1974	
4.167	404.499	02	52	DEC 07,1974	
4.183	404.499	02	53	DEC 07,1974	
4.200	404.499	02	54	DEC 07,1974	
4.217	404.522	02	55	DEC 07,1974	
4.233	404.522	02	56	DEC 07,1974	
4.250	404.522	02	57	DEC 07,1974	
4.267	404.522	02	58	DEC 07,1974	
4.283	404.522	02	59	DEC 07,1974	
4.300	406.857	03	00	DEC 07,1974	
4.317	404.568	03	01	DEC 07,1974	
4.333	404.568	03	02	DEC 07,1974	
4.350	404.568	03	03	DEC 07,1974	
4.367	404.568	03	04	DEC 07,1974	
4.383	404.568	03	05	DEC 07,1974	
4.400	404.637	03	06	DEC 07,1974	
4.417	404.637	03	07	DEC 07,1974	
4.433	404.637	03	08	DEC 07,1974	
4.450	404.659	03	09	DEC 07,1974	
4.467	404.659	03	10	DEC 07,1974	
4.483	404.659	03	11	DEC 07,1974	
4.500	404.659	03	12	DEC 07,1974	
4.517	404.659	03	13	DEC 07,1974	
4.533	404.659	03	14	DEC 07,1974	
4.550	404.682	03	15	DEC 07,1974	2 GPM INSIDE
4.567	404.705	03	16	DEC 07,1974	DRILL PIPE
4.583	404.728	03	17	DEC 07,1974	
4.600	404.728	03	18	DEC 07,1974	
4.617	404.728	03	19	DEC 07,1974	
4.633	404.774	03	20	DEC 07,1974	
4.650	404.774	03	21	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.667	404.774	03	22	DEC 07,1974	
4.683	404.843	03	23	DEC 07,1974	
4.700	404.843	03	24	DEC 07,1974	
4.717	404.843	03	25	DEC 07,1974	
4.733	404.843	03	26	DEC 07,1974	
4.750	404.865	03	27	DEC 07,1974	
4.767	404.888	03	28	DEC 07,1974	
4.783	404.888	03	29	DEC 07,1974	
4.800	404.888	03	30	DEC 07,1974	
4.817	404.888	03	31	DEC 07,1974	
4.833	404.957	03	32	DEC 07,1974	
4.850	404.957	03	33	DEC 07,1974	
4.867	404.957	03	34	DEC 07,1974	
4.883	404.957	03	35	DEC 07,1974	DECLINE
4.900	404.957	03	36	DEC 07,1974	
4.917	404.957	03	37	DEC 07,1974	
4.933	404.957	03	38	DEC 07,1974	
4.950	404.957	03	39	DEC 07,1974	
4.967	404.980	03	40	DEC 07,1974	5 GPM INSIDE
4.983	404.934	03	41	DEC 07,1974	DRILL PIPE
5.000	404.957	03	42	DEC 07,1974	
5.017	404.957	03	43	DEC 07,1974	
5.033	404.980	03	44	DEC 07,1974	
5.050	405.003	03	45	DEC 07,1974	
5.067	405.003	03	46	DEC 07,1974	
5.083	405.026	03	47	DEC 07,1974	
5.100	405.071	03	48	DEC 07,1974	
5.117	405.094	03	49	DEC 07,1974	
5.133	405.094	03	50	DEC 07,1974	
5.150	405.094	03	51	DEC 07,1974	
5.167	405.163	03	52	DEC 07,1974	
5.183	405.163	03	53	DEC 07,1974	
5.200	405.163	03	54	DEC 07,1974	
5.217	405.163	03	55	DEC 07,1974	
5.233	405.186	03	56	DEC 07,1974	
5.250	405.186	03	57	DEC 07,1974	
5.267	405.186	03	58	DEC 07,1974	
5.283	405.209	03	59	DEC 07,1974	
5.300	405.232	04	00	DEC 07,1974	
5.317	405.232	04	01	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.333	405.232	04	02	DEC 07,1974	
5.350	405.232	04	03	DEC 07,1974	
5.367	405.277	04	04	DEC 07,1974	
5.383	405.277	04	05	DEC 07,1974	DECLINE
5.400	405.277	04	06	DEC 07,1974	
5.417	405.346	04	07	DEC 07,1974	
5.433	405.346	04	08	DEC 07,1974	
5.450	405.277	04	09	DEC 07,1974	
5.467	405.277	04	10	DEC 07,1974	10 GPM INSIDE
5.483	405.277	04	11	DEC 07,1974	DRILL PIPE
5.500	405.277	04	12	DEC 07,1974	
5.517	405.300	04	13	DEC 07,1974	
5.533	405.300	04	14	DEC 07,1974	
5.550	405.369	04	15	DEC 07,1974	
5.567	405.369	04	16	DEC 07,1974	
5.583	405.392	04	17	DEC 07,1974	
5.600	405.438	04	18	DEC 07,1974	
5.617	405.483	04	19	DEC 07,1974	
5.633	405.529	04	20	DEC 07,1974	
5.650	405.529	04	21	DEC 07,1974	
5.667	405.529	04	22	DEC 07,1974	
5.683	405.575	04	23	DEC 07,1974	
5.700	405.598	04	24	DEC 07,1974	
5.717	405.621	04	25	DEC 07,1974	
5.733	405.621	04	26	DEC 07,1974	
5.750	405.644	04	27	DEC 07,1974	
5.767	405.667	04	28	DEC 07,1974	
5.783	405.667	04	29	DEC 07,1974	
5.800	405.690	04	30	DEC 07,1974	DECLINE
5.817	405.690	04	31	DEC 07,1974	
5.833	405.712	04	32	DEC 07,1974	
5.850	405.712	04	33	DEC 07,1974	
5.867	405.667	04	34	DEC 07,1974	
5.883	405.667	04	35	DEC 07,1974	20 GPM INSIDE
5.900	405.667	04	36	DEC 07,1974	DRILL PIPE
5.917	405.644	04	37	DEC 07,1974	
5.933	405.644	04	38	DEC 07,1974	
5.950	405.690	04	39	DEC 07,1974	
5.967	405.758	04	40	DEC 07,1974	
5.983	405.781	04	41	DEC 07,1974	

```
JOB NUMBER                                                    DATE OF JOB
SPG 11210 Q                                              DECEMBER 6, 1974

GAUGE/RUN NUMBER                                              DATE OF RUN
42 RUN NO. 17   DST NO. 20                              DECEMBER 17, 1974

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA   PRESSURE                  TIME    DATE              COMMENTS
    TIME     (PSI)                   HR MIN

    6.000    405.827                 04  42 DEC 07,1974
    6.017    405.896                 04  43 DEC 07,1974
    6.033    405.941                 04  44 DEC 07,1974
    6.050    405.964                 04  45 DEC 07,1974
    6.067    406.010                 04  46 DEC 07,1974
    6.083    406.056                 04  47 DEC 07,1974
    6.100    406.079                 04  48 DEC 07,1974
    6.117    406.147                 04  49 DEC 07,1974
    6.133    406.170                 04  50 DEC 07,1974
    6.150    406.193                 04  51 DEC 07,1974
    6.167    406.170                 04  52 DEC 07,1974
    6.183    406.262                 04  53 DEC 07,1974
    6.200    406.239                 04  54 DEC 07,1974
    6.217    406.285                 04  55 DEC 07,1974   DECLINE
    6.233    406.285                 04  56 DEC 07,1974
    6.250    406.285                 04  57 DEC 07,1974
    6.267    406.285                 04  58 DEC 07,1974
    6.283    406.216                 04  59 DEC 07,1974
    6.300    406.216                 05  00 DEC 07,1974   40 GPM INSIDE
    6.317    406.170                 05  01 DEC 07,1974   DRILL PIPE
    6.333    406.216                 05  02 DEC 07,1974
    6.350    406.262                 05  03 DEC 07,1974   OVER FLOW
    6.367    406.308                 05  04 DEC 07,1974
    6.383    406.376                 05  05 DEC 07,1974
    6.400    406.422                 05  06 DEC 07,1974
    6.417    406.468                 05  07 DEC 07,1974
    6.433    406.514                 05  08 DEC 07,1974
    6.450    406.536                 05  09 DEC 07,1974
    6.467    406.559                 05  10 DEC 07,1974
    6.483    406.605                 05  11 DEC 07,1974
    6.500    406.605                 05  12 DEC 07,1974
    6.517    406.628                 05  13 DEC 07,1974
    6.533    406.628                 05  14 DEC 07,1974
    6.550    406.674                 05  15 DEC 07,1974   DECLINE
    6.567    406.674                 05  16 DEC 07,1974
    6.583    406.674                 05  17 DEC 07,1974
    6.600    406.628                 05  18 DEC 07,1974
    6.617    406.628                 05  19 DEC 07,1974
    6.633    406.582                 05  20 DEC 07,1974
    6.650    406.559                 05  21 DEC 07,1974
```

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.667	406.491	05	22	DEC 07,1974	
6.683	406.468	05	23	DEC 07,1974	
6.700	406.399	05	24	DEC 07,1974	
6.717	406.399	05	25	DEC 07,1974	
6.733	406.308	05	26	DEC 07,1974	
6.750	406.308	05	27	DEC 07,1974	
6.767	406.285	05	28	DEC 07,1974	
6.783	406.239	05	29	DEC 07,1974	
6.800	406.216	05	30	DEC 07,1974	END DECLINE
6.817	406.216	05	31	DEC 07,1974	20 GPM ANNULUS
6.833	406.170	05	32	DEC 07,1974	
6.850	406.376	05	33	DEC 07,1974	
6.867	407.315	05	34	DEC 07,1974	
6.883	408.439	05	35	DEC 07,1974	
6.900	408.782	05	36	DEC 07,1974	
6.917	409.034	05	37	DEC 07,1974	
6.933	409.309	05	38	DEC 07,1974	
6.950	409.446	05	39	DEC 07,1974	
6.967	409.538	05	40	DEC 07,1974	
6.983	409.629	05	41	DEC 07,1974	
7.000	409.744	05	42	DEC 07,1974	
7.017	409.812	05	43	DEC 07,1974	
7.033	409.835	05	44	DEC 07,1974	
7.050	409.881	05	45	DEC 07,1974	
7.067	409.972	05	46	DEC 07,1974	
7.083	409.972	05	47	DEC 07,1974	
7.100	409.972	05	48	DEC 07,1974	
7.117	410.018	05	49	DEC 07,1974	
7.133	410.041	05	50	DEC 07,1974	
7.150	410.041	05	51	DEC 07,1974	
7.167	410.087	05	52	DEC 07,1974	
7.183	410.087	05	53	DEC 07,1974	
7.200	410.179	05	54	DEC 07,1974	
7.217	411.026	05	55	DEC 07,1974	40 GPM ANNULUS
7.233	412.536	05	56	DEC 07,1974	
7.250	413.589	05	57	DEC 07,1974	
7.267	414.482	05	58	DEC 07,1974	
7.283	415.146	05	59	DEC 07,1974	
7.300	415.695	06	00	DEC 07,1974	
7.317	416.176	06	01	DEC 07,1974	

JOB NUMBER
8PG 11210 Q

DATE OF JO
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17   DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.333	416.588	06	02	DEC 07,1974	
7.350	416.909	06	03	DEC 07,1974	
7.367	417.206	06	04	DEC 07,1974	
7.383	417.435	06	05	DEC 07,1974	
7.400	417.641	06	06	DEC 07,1974	
7.417	417.824	06	07	DEC 07,1974	
7.433	417.939	06	08	DEC 07,1974	
7.450	418.099	06	09	DEC 07,1974	
7.467	418.259	06	10	DEC 07,1974	
7.483	418.419	06	11	DEC 07,1974	
7.500	418.534	06	12	DEC 07,1974	
7.517	418.717	06	13	DEC 07,1974	
7.533	418.786	06	14	DEC 07,1974	
7.550	418.900	06	15	DEC 07,1974	
7.567	419.015	06	16	DEC 07,1974	
7.583	419.129	06	17	DEC 07,1974	
7.600	419.198	06	18	DEC 07,1974	
7.617	419.289	06	19	DEC 07,1974	
7.633	420.045	06	20	DEC 07,1974	60 GPM ANNULUS
7.650	421.006	06	21	DEC 07,1974	
7.667	421.739	06	22	DEC 07,1974	
7.683	423.021	06	23	DEC 07,1974	
7.700	422.906	06	24	DEC 07,1974	
7.717	423.456	06	25	DEC 07,1974	
7.733	423.868	06	26	DEC 07,1974	
7.750	424.280	06	27	DEC 07,1974	
7.767	424.646	06	28	DEC 07,1974	
7.783	424.944	06	29	DEC 07,1974	
7.800	425.264	06	30	DEC 07,1974	
7.817	425.562	06	31	DEC 07,1974	
7.833	425.859	06	32	DEC 07,1974	
7.850	426.042	06	33	DEC 07,1974	
7.867	426.225	06	34	DEC 07,1974	
7.883	425.790	06	35	DEC 07,1974	
7.900	426.248	06	36	DEC 07,1974	
7.917	426.523	06	37	DEC 07,1974	
7.933	426.775	06	38	DEC 07,1974	
7.950	427.004	06	39	DEC 07,1974	
7.967	427.256	06	40	DEC 07,1974	
7.983	427.416	06	41	DEC 07,1974	

JOB NUMBER
SPG 11210 Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
42 RUN NO. 17   DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
8.000	427.622	06	42	DEC 07,1974	
8.017	427.759	06	43	DEC 07,1974	
8.033	427.759	06	44	DEC 07,1974	
8.050	428.011	06	45	DEC 07,1974	
8.067	428.263	06	46	DEC 07,1974	
8.083	428.469	06	47	DEC 07,1974	
8.100	428.652	06	48	DEC 07,1974	
8.117	428.904	06	49	DEC 07,1974	
8.133	429.156	06	50	DEC 07,1974	
8.150	429.545	06	51	DEC 07,1974	
8.167	428.125	06	52	DEC 07,1974	
8.183	429.476	06	53	DEC 07,1974	
8.200	429.590	06	54	DEC 07,1974	
8.217	429.842	06	55	DEC 07,1974	
8.233	430.117	06	56	DEC 07,1974	
8.250	430.254	06	57	DEC 07,1974	
8.267	430.392	06	58	DEC 07,1974	
8.283	430.415	06	59	DEC 07,1974	
8.300	430.460	07	00	DEC 07,1974	
8.317	430.643	07	01	DEC 07,1974	
8.333	430.529	07	02	DEC 07,1974	
8.350	430.575	07	03	DEC 07,1974	
8.367	430.712	07	04	DEC 07,1974	
8.383	430.666	07	05	DEC 07,1974	
8.400	428.515	07	06	DEC 07,1974	
8.417	427.301	07	07	DEC 07,1974	
8.433	426.706	07	08	DEC 07,1974	
8.450	426.180	07	09	DEC 07,1974	
8.467	425.699	07	10	DEC 07,1974	
8.483	425.333	07	11	DEC 07,1974	
8.500	425.035	07	12	DEC 07,1974	
8.517	424.783	07	13	DEC 07,1974	
8.533	424.669	07	14	DEC 07,1974	
8.550	424.531	07	15	DEC 07,1974	
8.567	424.463	07	16	DEC 07,1974	
8.583	424.852	07	17	DEC 07,1974	
8.600	426.271	07	18	DEC 07,1974	
8.617	427.393	07	19	DEC 07,1974	
8.633	428.034	07	20	DEC 07,1974	START DECLINE
8.650	426.042	07	21	DEC 07,1974	

```
JOB NUMBER                                                    DATE OF JOB
SPG 11210 Q                                              DECEMBER 6, 1974

GAUGE/RUN NUMBER                                              DATE OF RUN
42 RUN NO. 17   DST NO. 20                              DECEMBER 17, 1974

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                 TIME     DATE             COMMENTS
    TIME      (PSI)                  HR MIN

    8.667    422.677                 07  22 DEC 07,1974
    8.683    420.228                 07  23 DEC 07,1974
    8.700    418.168                 07  24 DEC 07,1974
    8.717    416.474                 07  25 DEC 07,1974
    8.733    415.123                 07  26 DEC 07,1974
    8.750    414.001                 07  27 DEC 07,1974
    8.767    413.132                 07  28 DEC 07,1974
    8.783    412.399                 07  29 DEC 07,1974
    8.800    411.850                 07  30 DEC 07,1974
    8.817    411.346                 07  31 DEC 07,1974
    8.833    410.957                 07  32 DEC 07,1974
    8.850    410.659                 07  33 DEC 07,1974   END FLOW
```

532 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                          DATE OF JOB
SPG-11210-Q                                                     DECEMBER 6, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
42 RUN  NO. 17  DST NO. 20                                     DECEMBER 17, 1974

                                    SPERRY-SUN
                     PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                          TIME     DATE              COMMENTS
    TIME      (PSI)                           HR MIN

    0.000     410.659                         07   33 DEC 07,1974   FINAL SHUT-IN
     .017     410.013                         07   34 DEC 07,1974
     .033     409.766                         07   35 DEC 07,1974
     .050     409.629                         07   36 DEC 07,1974
     .067     409.515                         07   37 DEC 07,1974
     .083     409.400                         07   38 DEC 07,1974
     .100     409.286                         07   39 DEC 07,1974
     .117     409.171                         07   40 DEC 07,1974
     .133     409.080                         07   41 DEC 07,1974
     .150     409.011                         07   42 DEC 07,1974
     .167     408.965                         07   43 DEC 07,1974
     .183     411.529                         07   44 DEC 07,1974
     .200     394.908                         07   45 DEC 07,1974   END TEST
```

```
                          13 POINTS REPORTED THIS RUN
```

JOB NUMBER	DATE OF JOB
SPG-11210-Q	DECEMBER 6, 1974

SPERRY-SUN

PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 168 WITH 2500 LB. ELEMENT

GAUGE LOCATED INSIDE D.P. BELOW PACKER

DEPTH OF GAUGE IS 1439 FT.

TEST INTERVAL 1423 TO 1470 FT.

SET PACKER DEPTH IS 1423 FT.

INITIAL HYDROSTATIC IS 442.62 PSI

FINAL HYDROSTATIC IS 436.59 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

529 POINTS REPORTED THIS JOB

PAGE 1 OF 15 PAGES

JOB NUMBER
SPG-11210-0

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO, 17 DST NO, 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
0,000	88,394	22 42	DEC 06,1974	START FLOW
,017	127,061	22 43	DEC 06,1974	
,034	183,229	22 44	DEC 06,1974	
,050	225,053	22 45	DEC 06,1974	
,067	239,211	22 46	DEC 06,1974	
,084	265,596	22 47	DEC 06,1974	
,101	290,285	22 48	DEC 06,1974	
,117	312,633	22 49	DEC 06,1974	
,134	331,355	22 50	DEC 06,1974	
,151	337,199	22 51	DEC 06,1974	
,168	363,994	22 52	DEC 06,1974	
,184	377,625	22 53	DEC 06,1974	
,201	389,736	22 54	DEC 06,1974	
,218	400,149	22 55	DEC 06,1974	
,235	408,866	22 56	DEC 06,1974	
,251	416,179	22 57	DEC 06,1974	
,268	421,913	22 58	DEC 06,1974	
,285	427,003	22 59	DEC 06,1974	
,302	430,747	23 00	DEC 06,1974	
,318	433,496	23 01	DEC 06,1974	
,335	435,778	23 02	DEC 06,1974	
,352	437,650	23 03	DEC 06,1974	
,369	438,937	23 04	DEC 06,1974	
,386	439,756	23 05	DEC 06,1974	
,402	440,517	23 06	DEC 06,1974	
,419	440,985	23 07	DEC 06,1974	
,436	441,219	23 08	DEC 06,1974	
,453	441,511	23 09	DEC 06,1974	
,469	441,745	23 10	DEC 06,1974	
,486	441,804	23 11	DEC 06,1974	
,503	441,921	23 12	DEC 06,1974	
,520	441,979	23 13	DEC 06,1974	
,536	442,038	23 14	DEC 06,1974	
,553	442,096	23 15	DEC 06,1974	
,570	442,155	23 16	DEC 06,1974	
,587	442,272	23 17	DEC 06,1974	
,603	442,272	23 18	DEC 06,1974	
,620	442,389	23 19	DEC 06,1974	
,637	442,389	23 20	DEC 06,1974	
,654	442,389	23 21	DEC 06,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JO
DECEMBER 6, 197

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RU
DECEMBER 17, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.670	442.331	23	22	DEC 06,1974	
.687	442.389	23	23	DEC 06,1974	
.704	442.448	23	24	DEC 06,1974	
.721	442.565	23	25	DEC 06,1974	
.737	442.506	23	26	DEC 06,1974	
.754	442.565	23	27	DEC 06,1974	
.771	442.623	23	28	DEC 06,1974	
.788	442.623	23	29	DEC 06,1974	
.805	442.623	23	30	DEC 06,1974	
.821	442.682	23	31	DEC 06,1974	
.838	442.740	23	32	DEC 06,1974	
.855	442.799	23	33	DEC 06,1974	
.872	442.974	23	34	DEC 06,1974	
.888	442.974	23	35	DEC 06,1974	
.905	442.799	23	36	DEC 06,1974	
.922	442.857	23	37	DEC 06,1974	
.939	442.799	23	38	DEC 06,1974	
.955	442.857	23	39	DEC 06,1974	
.972	442.916	23	40	DEC 06,1974	
.989	442.857	23	41	DEC 06,1974	
1.006	442.857	23	42	DEC 06,1974	
1.022	442.916	23	43	DEC 06,1974	
1.039	442.916	23	44	DEC 06,1974	
1.056	442.916	23	45	DEC 06,1974	
1.073	443.267	23	46	DEC 06,1974	
1.089	443.091	23	47	DEC 06,1974	
1.106	443.442	23	48	DEC 06,1974	
1.123	443.208	23	49	DEC 06,1974	
1.140	444.027	23	50	DEC 06,1974	
1.157	443.325	23	51	DEC 06,1974	
1.173	443.910	23	52	DEC 06,1974	
1.190	443.267	23	53	DEC 06,1974	
1.207	443.618	23	54	DEC 06,1974	
1.224	443.325	23	55	DEC 06,1974	
1.240	443.676	23	56	DEC 06,1974	
1.257	443.325	23	57	DEC 06,1974	
1.274	443.384	23	58	DEC 06,1974	
1.291	443.267	23	59	DEC 06,1974	
1.307	443.267	00	00	DEC 07,1974	
1.324	443.208	00	01	DEC 07,1974	

```
JOB NUMBER                                                                 DATE OF JOB
SPG-11210-Q                                                          DECEMBER 6, 1974

GAUGE/RUN NUMBER                                                          DATE OF RUN
168 RUN NO. 17  DST NO. 20                                          DECEMBER 17, 1974

                                     SPERRY-SUN
                      PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                         TIME      DATE              COMMENTS
    TIME      (PSI)                          HR MIN

    1.341     443.208                        00   02 DEC 07,1974
    1.358     443.208                        00   03 DEC 07,1974
    1.374     443.325                        00   04 DEC 07,1974
    1.391     443.442                        00   05 DEC 07,1974
    1.408     443.442                        00   06 DEC 07,1974
    1.425     443.384                        00   07 DEC 07,1974
    1.441     443.735                        00   08 DEC 07,1974
    1.458     443.501                        00   09 DEC 07,1974
    1.475     443.384                        00   10 DEC 07,1974
    1.492     443.384                        00   12 DEC 07,1974
    1.509     443.442                        00   13 DEC 07,1974
    1.525     443.618                        00   14 DEC 07,1974
    1.542     443.559                        00   15 DEC 07,1974
    1.559     443.442                        00   16 DEC 07,1974
    1.576     443.501                        00   17 DEC 07,1974
    1.592     443.442                        00   18 DEC 07,1974
    1.609     443.384                        00   19 DEC 07,1974
    1.626     443.384                        00   20 DEC 07,1974
    1.643     443.442                        00   21 DEC 07,1974
    1.659     443.618                        00   22 DEC 07,1974
    1.676     443.501                        00   23 DEC 07,1974
    1.693     443.442                        00   24 DEC 07,1974
    1.710     443.618                        00   25 DEC 07,1974   START JETTING
    1.726     443.442                        00   26 DEC 07,1974
    1.743     443.559                        00   27 DEC 07,1974
    1.760     443.442                        00   28 DEC 07,1974
    1.777     448.766                        00   29 DEC 07,1974
    1.793     470.822                        00   30 DEC 07,1974
    1.810     411.616                        00   31 DEC 07,1974
    1.827     401.963                        00   32 DEC 07,1974
    1.844     405.766                        00   33 DEC 07,1974
    1.861     407.755                        00   34 DEC 07,1974
    1.877     407.989                        00   35 DEC 07,1974
    1.894     408.106                        00   36 DEC 07,1974
    1.911     407.989                        00   37 DEC 07,1974
    1.928     408.106                        00   38 DEC 07,1974
    1.944     407.989                        00   39 DEC 07,1974
    1.961     408.106                        00   40 DEC 07,1974
    1.978     407.930                        00   41 DEC 07,1974
    1.995     407.930                        00   42 DEC 07,1974
```

JOB NUMBER
SPG-11210-G

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN

PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
2.011	407.813	00	43	DEC 07,1974	
2.028	407.989	00	44	DEC 07,1974	
2.045	408.574	00	45	DEC 07,1974	
2.062	408.925	00	46	DEC 07,1974	
2.078	408.808	00	47	DEC 07,1974	
2.095	408.515	00	48	DEC 07,1974	
2.112	408.281	00	49	DEC 07,1974	
2.129	408.047	00	50	DEC 07,1974	
2.145	408.164	00	51	DEC 07,1974	
2.162	408.106	00	52	DEC 07,1974	
2.179	408.106	00	53	DEC 07,1974	
2.196	408.164	00	54	DEC 07,1974	
2.212	408.223	00	55	DEC 07,1974	
2.229	408.164	00	56	DEC 07,1974	
2.246	408.106	00	57	DEC 07,1974	
2.263	407.989	00	58	DEC 07,1974	
2.280	408.047	00	59	DEC 07,1974	
2.296	408.340	01	00	DEC 07,1974	
2.313	408.281	01	01	DEC 07,1974	
2.330	408.164	01	02	DEC 07,1974	
2.347	407.989	01	03	DEC 07,1974	
2.363	408.047	01	04	DEC 07,1974	
2.380	408.164	01	05	DEC 07,1974	
2.397	408.223	01	06	DEC 07,1974	
2.414	408.281	01	07	DEC 07,1974	
2.430	408.164	01	08	DEC 07,1974	
2.447	408.281	01	09	DEC 07,1974	
2.464	408.223	01	10	DEC 07,1974	
2.481	408.340	01	11	DEC 07,1974	
2.497	408.223	01	12	DEC 07,1974	
2.514	407.404	01	13	DEC 07,1974	
2.531	407.579	01	14	DEC 07,1974	
2.548	407.579	01	15	DEC 07,1974	
2.564	406.702	01	16	DEC 07,1974	
2.581	406.702	01	17	DEC 07,1974	
2.598	407.287	01	18	DEC 07,1974	
2.615	407.345	01	19	DEC 07,1974	
2.632	407.638	01	20	DEC 07,1974	
2.648	407.579	01	21	DEC 07,1974	
2.665	407.462	01	22	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 197

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.682	407.462	01	23	DEC 07,1974	
2.699	407.633	01	24	DEC 07,1974	
2.715	407.755	01	25	DEC 07,1974	END JETTING
2.732	408.691	01	26	DEC 07,1974	
2.749	409.042	01	27	DEC 07,1974	
2.766	385.523	01	28	DEC 07,1974	
2.782	402.080	01	29	DEC 07,1974	
2.799	412.786	01	30	DEC 07,1974	
2.816	420.801	01	31	DEC 07,1974	
2.833	426.827	01	32	DEC 07,1974	
2.849	431.507	01	33	DEC 07,1974	
2.866	435.018	01	34	DEC 07,1974	
2.883	437.007	01	35	DEC 07,1974	
2.900	439.113	01	36	DEC 07,1974	
2.916	440.107	01	37	DEC 07,1974	
2.933	440.634	01	38	DEC 07,1974	
2.950	441.453	01	39	DEC 07,1974	
2.967	441.687	01	40	DEC 07,1974	
2.984	441.687	01	41	DEC 07,1974	
3.000	441.570	01	42	DEC 07,1974	
3.017	442.272	01	43	DEC 07,1974	
3.034	442.155	01	44	DEC 07,1974	
3.051	442.155	01	45	DEC 07,1974	
3.067	442.155	01	46	DEC 07,1974	
3.084	442.096	01	47	DEC 07,1974	
3.101	442.389	01	48	DEC 07,1974	
3.118	442.682	01	49	DEC 07,1974	
3.134	442.857	01	50	DEC 07,1974	
3.151	442.916	01	51	DEC 07,1974	
3.168	442.916	01	52	DEC 07,1974	
3.185	443.091	01	53	DEC 07,1974	
3.201	443.150	01	54	DEC 07,1974	
3.218	443.208	01	55	DEC 07,1974	
3.235	443.208	01	56	DEC 07,1974	
3.252	443.150	01	57	DEC 07,1974	
3.268	443.208	01	58	DEC 07,1974	
3.285	443.150	01	59	DEC 07,1974	
3.302	443.267	02	00	DEC 07,1974	
3.319	443.267	02	01	DEC 07,1974	
3.336	443.208	02	02	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3,352	443,267	02	03	DEC 07,1974	
3,369	443,208	02	04	DEC 07,1974	
3,386	443,325	02	05	DEC 07,1974	
3,403	443,325	02	06	DEC 07,1974	
3,419	443,325	02	07	DEC 07,1974	
3,436	443,384	02	08	DEC 07,1974	
3,453	443,384	02	09	DEC 07,1974	
3,470	443,325	02	10	DEC 07,1974	
3,486	443,384	02	11	DEC 07,1974	
3,503	443,325	02	12	DEC 07,1974	
3,520	443,442	02	13	DEC 07,1974	
3,537	443,442	02	14	DEC 07,1974	
3,553	443,442	02	15	DEC 07,1974	
3,570	443,442	02	16	DEC 07,1974	
3,587	443,501	02	17	DEC 07,1974	
3,604	443,501	02	18	DEC 07,1974	
3,620	443,501	02	19	DEC 07,1974	
3,637	443,501	02	20	DEC 07,1974	
3,654	443,501	02	21	DEC 07,1974	
3,671	443,501	02	22	DEC 07,1974	
3,687	443,501	02	23	DEC 07,1974	
3,704	443,559	02	24	DEC 07,1974	
3,721	443,559	02	25	DEC 07,1974	
3,738	443,559	02	26	DEC 07,1974	
3,755	443,618	02	27	DEC 07,1974	
3,771	443,559	02	28	DEC 07,1974	
3,788	443,559	02	29	DEC 07,1974	
3,805	443,618	02	30	DEC 07,1974	
3,822	443,676	02	31	DEC 07,1974	
3,838	443,618	02	32	DEC 07,1974	
3,855	443,618	02	33	DEC 07,1974	
3,872	443,676	02	34	DEC 07,1974	
3,889	443,618	02	35	DEC 07,1974	
3,905	443,676	02	36	DEC 07,1974	
3,922	443,676	02	37	DEC 07,1974	
3,939	443,735	02	38	DEC 07,1974	
3,956	443,793	02	39	DEC 07,1974	
3,972	443,735	02	40	DEC 07,1974	
3,989	443,793	02	41	DEC 07,1974	
4,006	443,793	02	42	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 197

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
4.023	443.852	02	43	DEC 07,1974	
4.039	443.852	02	44	DEC 07,1974	
4.056	443.793	02	45	DEC 07,1974	
4.073	443.735	02	46	DEC 07,1974	
4.090	444.086	02	47	DEC 07,1974	
4.107	444.027	02	48	DEC 07,1974	
4.123	443.969	02	49	DEC 07,1974	
4.140	443.910	02	50	DEC 07,1974	
4.157	443.910	02	51	DEC 07,1974	
4.174	443.910	02	52	DEC 07,1974	
4.190	443.852	02	53	DEC 07,1974	
4.207	443.852	02	54	DEC 07,1974	
4.224	443.969	02	55	DEC 07,1974	
4.241	443.910	02	56	DEC 07,1974	
4.257	443.910	02	57	DEC 07,1974	
4.274	443.910	02	58	DEC 07,1974	
4.291	443.852	02	59	DEC 07,1974	
4.308	444.086	03	00	DEC 07,1974	
4.324	444.086	03	01	DEC 07,1974	
4.341	443.969	03	02	DEC 07,1974	
4.358	444.027	03	03	DEC 07,1974	
4.375	443.969	03	04	DEC 07,1974	
4.391	443.969	03	05	DEC 07,1974	
4.408	443.969	03	06	DEC 07,1974	
4.425	443.969	03	07	DEC 07,1974	
4.442	444.027	03	09	DEC 07,1974	
4.459	444.027	03	10	DEC 07,1974	
4.475	444.027	03	11	DEC 07,1974	
4.492	444.027	03	12	DEC 07,1974	
4.509	443.969	03	13	DEC 07,1974	
4.526	443.969	03	14	DEC 07,1974	
4.542	444.027	03	15	DEC 07,1974	2 GPM INSIDE
4.559	444.027	03	16	DEC 07,1974	DRILL PIPE
4.576	444.086	03	17	DEC 07,1974	
4.593	444.027	03	18	DEC 07,1974	
4.609	444.086	03	19	DEC 07,1974	
4.626	444.086	03	20	DEC 07,1974	
4.643	444.963	03	21	DEC 07,1974	
4.660	446.777	03	22	DEC 07,1974	
4.676	448.122	03	23	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.693	448.766	03	24	DEC 07,1974	
4.710	449.234	03	25	DEC 07,1974	
4.727	449.585	03	26	DEC 07,1974	
4.743	449.936	03	27	DEC 07,1974	
4.760	450.053	03	28	DEC 07,1974	
4.777	450.112	03	29	DEC 07,1974	
4.794	450.287	03	30	DEC 07,1974	
4.811	450.404	03	31	DEC 07,1974	
4.827	450.404	03	32	DEC 07,1974	
4.844	450.521	03	33	DEC 07,1974	
4.861	450.521	03	34	DEC 07,1974	
4.878	450.580	03	35	DEC 07,1974	DECLINE
4.894	450.638	03	36	DEC 07,1974	
4.911	450.638	03	37	DEC 07,1974	
4.928	450.697	03	38	DEC 07,1974	
4.945	450.755	03	39	DEC 07,1974	
4.961	450.346	03	40	DEC 07,1974	5 GPM INSIDE
4.978	448.532	03	41	DEC 07,1974	DRILL PIPE
4.995	447.186	03	42	DEC 07,1974	
5.012	446.133	03	43	DEC 07,1974	
5.028	445.548	03	44	DEC 07,1974	
5.045	445.314	03	45	DEC 07,1974	
5.062	449.526	03	46	DEC 07,1974	
5.079	452.452	03	47	DEC 07,1974	
5.095	454.324	03	48	DEC 07,1974	
5.112	455.494	03	49	DEC 07,1974	
5.129	456.547	03	50	DEC 07,1974	
5.146	457.190	03	51	DEC 07,1974	
5.162	457.717	03	52	DEC 07,1974	
5.179	458.068	03	53	DEC 07,1974	
5.196	458.361	03	54	DEC 07,1974	
5.213	458.595	03	55	DEC 07,1974	
5.230	458.829	03	56	DEC 07,1974	
5.246	459.004	03	57	DEC 07,1974	
5.263	459.180	03	58	DEC 07,1974	
5.280	459.297	03	59	DEC 07,1974	
5.297	459.297	04	00	DEC 07,1974	
5.313	459.355	04	01	DEC 07,1974	
5.330	459.531	04	02	DEC 07,1974	
5.347	459.648	04	03	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 197

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
5.364	459.648	04	04	DEC 07,1974	
5.380	459.706	04	05	DEC 07,1974	DECLINE
5.397	459.823	04	06	DEC 07,1974	
5.414	459.882	04	07	DEC 07,1974	
5.431	459.882	04	08	DEC 07,1974	
5.447	459.882	04	09	DEC 07,1974	
5.464	457.366	04	10	DEC 07,1974	10 GPM INSIDE
5.481	453.680	04	11	DEC 07,1974	DRILL PIPE
5.498	450.697	04	12	DEC 07,1974	
5.514	448.707	04	13	DEC 07,1974	
5.531	447.830	04	14	DEC 07,1974	
5.548	453.563	04	15	DEC 07,1974	
5.565	462.397	04	16	DEC 07,1974	
5.582	468.014	04	17	DEC 07,1974	
5.598	475.321	04	18	DEC 07,1974	
5.615	477.836	04	19	DEC 07,1974	
5.632	479.884	04	20	DEC 07,1974	
5.649	481.639	04	21	DEC 07,1974	
5.665	483.102	04	22	DEC 07,1974	
5.682	484.447	04	23	DEC 07,1974	
5.699	485.559	04	24	DEC 07,1974	
5.716	486.495	04	25	DEC 07,1974	
5.732	487.373	04	26	DEC 07,1974	
5.749	488.250	04	27	DEC 07,1974	
5.766	488.952	04	28	DEC 07,1974	
5.783	489.713	04	29	DEC 07,1974	
5.799	490.356	04	30	DEC 07,1974	DECLINE
5.816	491.175	04	31	DEC 07,1974	
5.833	491.877	04	32	DEC 07,1974	
5.850	490.298	04	33	DEC 07,1974	
5.866	480.996	04	34	DEC 07,1974	
5.883	472.747	04	35	DEC 07,1974	20 GPM INSIDE
5.900	466.025	04	36	DEC 07,1974	DRILL PIPE
5.917	460.759	04	37	DEC 07,1974	
5.934	458.595	04	38	DEC 07,1974	
5.950	476.140	04	39	DEC 07,1974	
5.967	490.707	04	40	DEC 07,1974	
5.984	502.116	04	41	DEC 07,1974	
6.001	511.359	04	42	DEC 07,1974	
6.017	518.731	04	43	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.034	524.932	04	44	DEC 07,1974	
6.051	530.665	04	45	DEC 07,1974	
6.068	539.850	04	46	DEC 07,1974	
6.084	543.653	04	47	DEC 07,1974	
6.101	546.929	04	48	DEC 07,1974	
6.118	550.089	04	49	DEC 07,1974	
6.135	552.721	04	50	DEC 07,1974	
6.151	555.295	04	51	DEC 07,1974	
6.168	557.577	04	52	DEC 07,1974	
6.185	559.683	04	53	DEC 07,1974	
6.202	561.672	04	54	DEC 07,1974	
6.218	563.779	04	55	DEC 07,1974	DECLINE
6.235	565.475	04	56	DEC 07,1974	
6.252	554.125	04	57	DEC 07,1974	
6.269	535.463	04	58	DEC 07,1974	
6.286	519.433	04	59	DEC 07,1974	
6.302	505.977	05	00	DEC 07,1974	40 GPM INSIDE
6.319	492.696	05	01	DEC 07,1974	DRILL PIPE
6.336	573.666	05	02	DEC 07,1974	
6.353	577.819	05	03	DEC 07,1974	OVERFLOW
6.369	600.051	05	04	DEC 07,1974	
6.386	606.018	05	05	DEC 07,1974	
6.403	611.512	05	06	DEC 07,1974	
6.420	615.724	05	07	DEC 07,1974	
6.436	618.532	05	08	DEC 07,1974	
6.453	620.697	05	09	DEC 07,1974	
6.470	622.335	05	10	DEC 07,1974	
6.487	623.505	05	11	DEC 07,1974	
6.503	624.441	05	12	DEC 07,1974	
6.520	625.377	05	13	DEC 07,1974	
6.537	626.196	05	14	DEC 07,1974	
6.554	626.781	05	15	DEC 07,1974	DECLINE
6.570	627.483	05	16	DEC 07,1974	
6.587	604.263	05	17	DEC 07,1974	
6.604	581.564	05	18	DEC 07,1974	
6.621	562.023	05	19	DEC 07,1974	
6.637	544.414	05	20	DEC 07,1974	
6.654	528.618	05	21	DEC 07,1974	
6.671	515.279	05	22	DEC 07,1974	
6.688	503.754	05	23	DEC 07,1974	

```
JOB NUMBER                                                   DATE OF JOB
SPG-11210-Q                                             DECEMBER 6, 1974

GAUGE/RUN NUMBER                                             DATE OF RUN
168 RUN NO. 17  DST NO. 20                             DECEMBER 17, 1974

                              SPERRY-SUN
             PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                   TIME      DATE            COMMENTS
    TIME      (PSI)                    HR MIN

    6.705     493.749                  05  24 DEC 07,1974
    6.721     485.559                  05  25 DEC 07,1974
    6.738     478.597                  05  26 DEC 07,1974
    6.755     472.747                  05  27 DEC 07,1974
    6.772     467.604                  05  28 DEC 07,1974
    6.788     463.333                  05  29 DEC 07,1974
    6.805     459.999                  05  30 DEC 07,1974  END DECLINE
    6.822     457.307                  05  31 DEC 07,1974  20 GPM ANNULUS
    6.839     455.084                  05  32 DEC 07,1974
    6.855     453.505                  05  33 DEC 07,1974
    6.872     452.159                  05  34 DEC 07,1974
    6.889     451.282                  05  35 DEC 07,1974
    6.906     450.521                  05  36 DEC 07,1974
    6.922     450.053                  05  37 DEC 07,1974
    6.939     449.760                  05  38 DEC 07,1974
    6.956     449.468                  05  39 DEC 07,1974
    6.973     449.292                  05  40 DEC 07,1974
    6.989     449.175                  05  41 DEC 07,1974
    7.006     449.058                  05  42 DEC 07,1974
    7.023     449.058                  05  43 DEC 07,1974
    7.040     448.941                  05  44 DEC 07,1974
    7.057     448.883                  05  45 DEC 07,1974
    7.073     448.766                  05  46 DEC 07,1974
    7.090     448.824                  05  47 DEC 07,1974
    7.107     448.824                  05  48 DEC 07,1974
    7.124     448.707                  05  49 DEC 07,1974
    7.140     448.707                  05  50 DEC 07,1974
    7.157     448.707                  05  51 DEC 07,1974
    7.174     448.707                  05  52 DEC 07,1974
    7.191     448.707                  05  53 DEC 07,1974
    7.207     448.649                  05  54 DEC 07,1974
    7.224     448.649                  05  55 DEC 07,1974  40 GPM ANNULUS
    7.241     448.532                  05  56 DEC 07,1974
    7.258     448.532                  05  57 DEC 07,1974
    7.274     448.707                  05  58 DEC 07,1974
    7.291     448.941                  05  59 DEC 07,1974
    7.308     449.234                  06  00 DEC 07,1974
    7.325     449.468                  06  01 DEC 07,1974
    7.341     449.643                  06  02 DEC 07,1974
    7.358     449.878                  06  03 DEC 07,1974
```

JOB NUMBER
SPG-11210-Q

DATE OF JO
DECEMBER 6, 197

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RU
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.375	449.995	06	04	DEC 07,1974	
7.392	450.112	06	06	DEC 07,1974	
7.409	450.229	06	07	DEC 07,1974	
7.425	450.346	06	08	DEC 07,1974	
7.442	450.463	06	09	DEC 07,1974	
7.459	450.521	06	10	DEC 07,1974	
7.476	450.521	06	11	DEC 07,1974	
7.492	450.697	06	12	DEC 07,1974	
7.509	450.697	06	13	DEC 07,1974	
7.526	450.697	06	14	DEC 07,1974	
7.543	450.755	06	15	DEC 07,1974	
7.559	450.814	06	16	DEC 07,1974	
7.576	450.872	06	17	DEC 07,1974	
7.593	450.814	06	18	DEC 07,1974	
7.610	450.872	06	19	DEC 07,1974	
7.626	450.989	06	20	DEC 07,1974	60 GPM ANNULUS
7.643	450.989	06	21	DEC 07,1974	
7.660	451.048	06	22	DEC 07,1974	
7.677	451.048	06	23	DEC 07,1974	
7.693	451.106	06	24	DEC 07,1974	
7.710	451.223	06	25	DEC 07,1974	
7.727	451.340	06	26	DEC 07,1974	
7.744	451.457	06	27	DEC 07,1974	
7.761	451.633	06	28	DEC 07,1974	
7.777	451.808	06	29	DEC 07,1974	
7.794	451.808	06	30	DEC 07,1974	
7.811	452.042	06	31	DEC 07,1974	
7.828	452.042	06	32	DEC 07,1974	
7.844	452.101	06	33	DEC 07,1974	
7.861	452.218	06	34	DEC 07,1974	
7.878	452.393	06	35	DEC 07,1974	
7.895	452.393	06	36	DEC 07,1974	
7.911	452.393	06	37	DEC 07,1974	
7.928	458.653	06	38	DEC 07,1974	
7.945	452.510	06	39	DEC 07,1974	
7.962	452.393	06	40	DEC 07,1974	
7.978	452.335	06	41	DEC 07,1974	
7.995	452.335	06	42	DEC 07,1974	
8.012	452.335	06	43	DEC 07,1974	
8.029	452.335	06	44	DEC 07,1974	

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.045	459.823	06	45	DEC 07,1974	
8.062	452.218	06	46	DEC 07,1974	
8.079	452.159	06	47	DEC 07,1974	
8.096	452.159	06	48	DEC 07,1974	
8.112	452.159	06	49	DEC 07,1974	
8.129	452.101	06	50	DEC 07,1974	
8.146	452.218	06	51	DEC 07,1974	
8.163	452.101	06	52	DEC 07,1974	
8.160	452.101	06	53	DEC 07,1974	
8.196	452.101	06	54	DEC 07,1974	
8.213	467.078	06	55	DEC 07,1974	
8.230	452.042	06	56	DEC 07,1974	
8.247	451.925	06	57	DEC 07,1974	
8.263	451.867	06	58	DEC 07,1974	
8.280	451.925	06	59	DEC 07,1974	
8.297	451.867	07	00	DEC 07,1974	
8.314	451.867	07	01	DEC 07,1974	
8.330	451.925	07	02	DEC 07,1974	
8.347	451.925	07	03	DEC 07,1974	
8.364	451.867	07	04	DEC 07,1974	
8.381	451.984	07	05	DEC 07,1974	
8.397	451.984	07	06	DEC 07,1974	
8.414	451.867	07	07	DEC 07,1974	
8.431	451.750	07	08	DEC 07,1974	
8.448	451.574	07	09	DEC 07,1974	
8.464	451.516	07	10	DEC 07,1974	
8.481	451.399	07	11	DEC 07,1974	
8.498	451.282	07	12	DEC 07,1974	
8.515	451.340	07	13	DEC 07,1974	
8.532	451.340	07	14	DEC 07,1974	
8.548	451.165	07	15	DEC 07,1974	
8.565	451.165	07	16	DEC 07,1974	
8.582	451.048	07	17	DEC 07,1974	
8.599	451.106	07	18	DEC 07,1974	
8.615	451.223	07	19	DEC 07,1974	START DECLINE
8.632	451.223	07	20	DEC 07,1974	
8.649	451.223	07	21	DEC 07,1974	
8.666	451.340	07	22	DEC 07,1974	
8.682	451.165	07	23	DEC 07,1974	
8.699	450.989	07	24	DEC 07,1974	

JOB NUMBER
SFG-11210-Q

DATE OF JO
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.716	450.814	07	25	DEC 07,1974	
8.733	450.638	07	26	DEC 07,1974	
8.749	450.404	07	27	DEC 07,1974	
8.766	450.053	07	28	DEC 07,1974	
8.783	449.819	07	29	DEC 07,1974	
8.800	449.351	07	30	DEC 07,1974	
8.816	449.351	07	31	DEC 07,1974	
8.833	449.292	07	32	DEC 07,1974	
8.850	449.234	07	33	DEC 07,1974	END FLOW

529 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-Q

DATE OF JOB
DECEMBER 6, 1974

GAUGE/RUN NUMBER
168 RUN NO. 17 DST NO. 20

DATE OF RUN
DECEMBER 17, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	449.234	07	33	DEC 07,1974	FINAL SHUT-IN
.017	449.234	07	34	DEC 07,1974	
.033	449.175	07	35	DEC 07,1974	
.050	449.058	07	36	DEC 07,1974	
.067	448.590	07	37	DEC 07,1974	
.083	448.532	07	38	DEC 07,1974	
.100	448.473	07	39	DEC 07,1974	
.117	448.415	07	40	DEC 07,1974	
.133	448.239	07	41	DEC 07,1974	
.150	448.239	07	42	DEC 07,1974	
.167	448.239	07	43	DEC 07,1974	
.183	448.239	07	44	DEC 07,1974	
.200	448.064	07	45	DEC 07,1974	END TEST

13 POINTS REPORTED THIS RUN

JOHNSTON

Schlumberger

technical report

RECEIVED

DEC 23 1974

A. J. ROGERS

II B-1000

F.R. #09077 C

COMPANY ATLANTIC-RICHFIELD CO. WELL FEDERAL S-G #17 TEST NO. 21 COUNTY RIO BLANCO STATE COLORADO

SURFACE INFORMATION

cription (Rate of Flow)		Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool		0223	-	-
CLOSED FOR INITIAL SHUT-IN		0226	-	-
FINISHED SHUT-IN		0256	-	-
RE-OPENED TOOL		0300	-	-
STARTED JETTING AIR				
STOPPED JETTING AIR				
21 GAL/MIN	FROM	0845	-	-
	TO	0905	-	-
39 GAL/MIN	FROM	0905	-	-
	TO	0925	-	-
61 GAL/MIN	FROM	0925	-	-
	TO	0945	-	-
RECOVERY IN 30 MINUTES	FROM	0945	-	-
	TO	1015	-	-
PULLED PACKER LOOSE		1210	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 49 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1522 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 297' I.D. -
Drill Pipe Length 1135' I.D. -
Packer Depth(s) 1469' & 1473' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: ______

Address 1500 SECURITY LIFE BUILDING; DENVER, COLORADO 80202
mpany ATLANTIC-RICHFIELD COMPANY Field SORGUM GULCH
Well FEDERAL S-G #17 Location 436 FWL & 181 FSL, SEC. 16-3S-96W
Test Interval 1473' TO 1522' Test # 21 Date 12-10-74
County RIO BLANCO State COLORADO II B-1001
Technician BURNS (VERNAL) Test Approved By MR. FRED BURNS
Field Report No. 09077 C
No. Reports Requested 14(13x's)

PRESSURE DATA

Instrument No.		AK-1-5009	AK-1-5010	
Capacity (P.S.I.G.)		1500	1600	
Instrument Depth		1456'	1494'	
Instrument Opening		INSIDE	OUTSIDE	
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.		107	107	
Initial Hydrostatic Mud	A	–	–	
Initial Shut-in	B	–	–	
Initial Flow	C	–	–	
Final Flow	D	–	–	
Final Shut-in	E	–	–	
Final Hydrostatic Mud	F	–	–	

Field Report No. 09077 C

TIME DATA

Time Given	Time Computed
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.

Remarks:

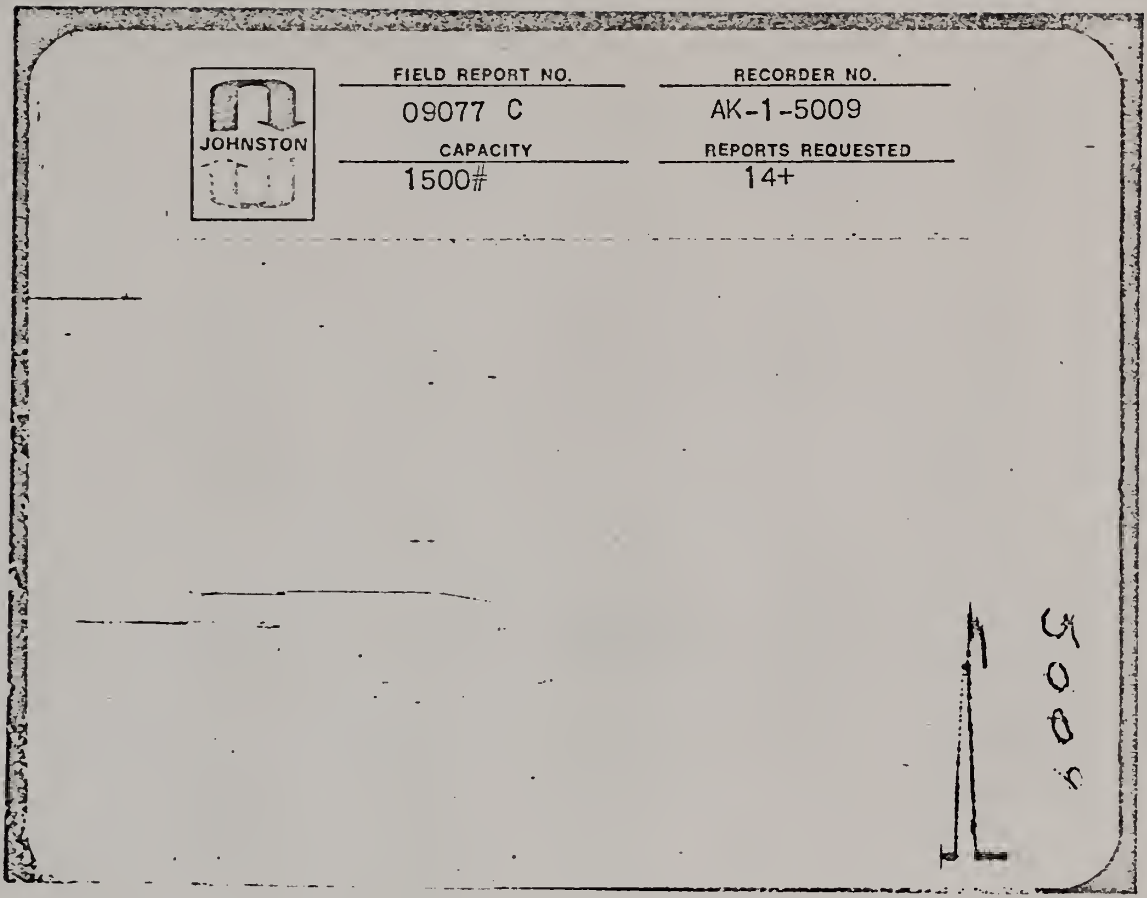
CLOCKS STOPPED, NO PRESSURES REPORTED.

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

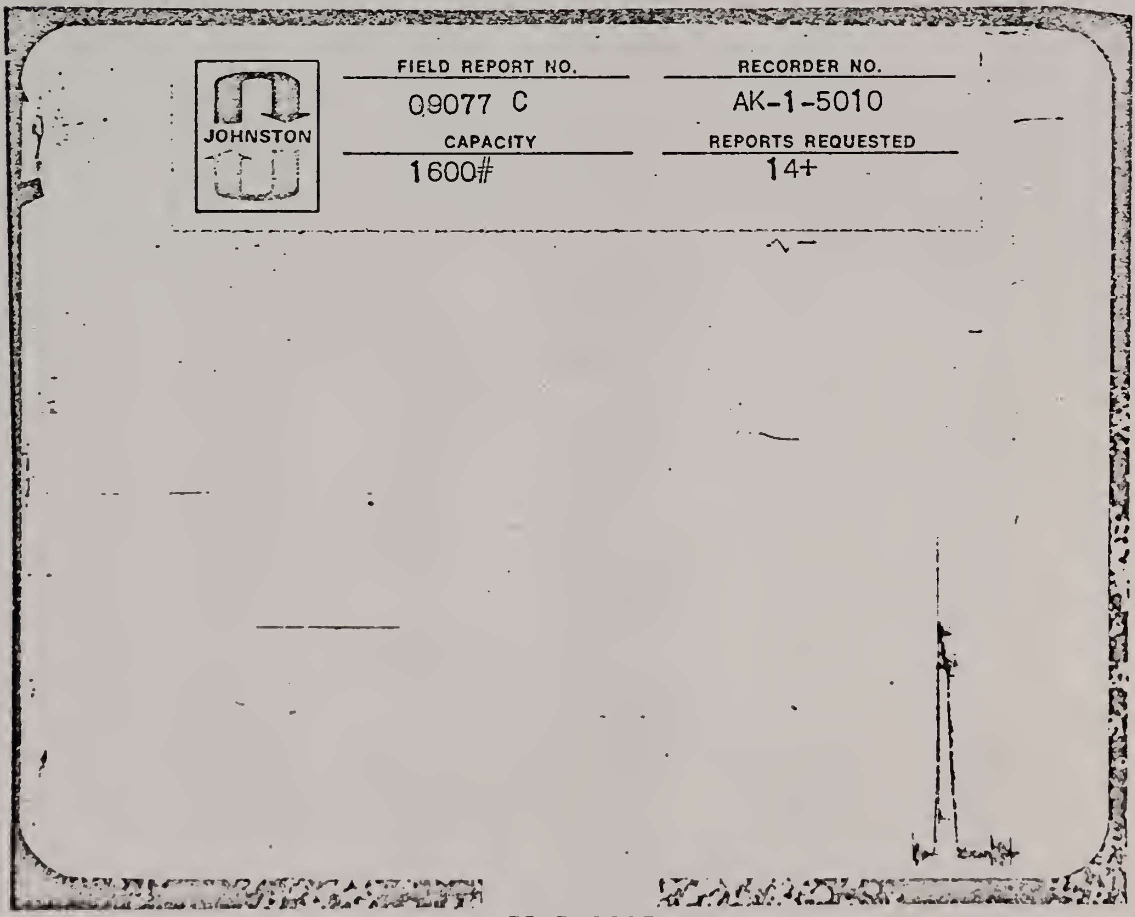
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09077 C	AK-1-5009
CAPACITY	REPORTS REQUESTED
1500#	14+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09077 C	AK-1-5010
CAPACITY	REPORTS REQUESTED
1600#	14+

DST 21

1473-1522

sperry-sun

POST OFFICE BOX 36363 HOUSTON, TEXAS 77036 (713) 494-3021

J. A. Fouché
President

January 7, 1975

Mr. Frederick R. Scheerer
Atlantic-Richfield Company
1500 Security Life Building
Denver, Colorado 80202

Dear Sir:

Enclosed is the original of our Precision Pressure Gauge Drill Stem Test Job SPG-11210-S, performed on your Federal SG-17 Well, Tract C-b, Piceance Creek Basin, Sorghum Gulch, Rio Blanco County, Colorado on December 9, 1974.

Also enclosed are the charts for gauge numbers 42 and 209 with Field Data Sheet.

Distribution is being made according to the attached mailing list.

Thank you for this opportunity to be of service.

Very truly yours,

Carl Kisinger Jr.

Carl Kisinger, Jr.
Manager, Pressure Services

CK:jg
Enclosures

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210S Date 12/9/74 Run DST-21 Office CASPER

Customer Arco Et AL Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio BLANCO

Well Sorghum Gulch No. 17 Field TRACt Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 2115	12/9/74	2.		
Depart: Well/~~Dock~~	1. 1433	12/10/74	2.		17hr18min Hrs.
Gauge Start in Hole	1. 2240	12/9/74	2. 2318	12/9/74	
Gauge Out of Hole	1. 1433	12/10/74	2. 1342	12/10/74	15hr 53min Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # [illegible]42 Element # 32761 Range 1000lbs Time Mode 1min

Btm.Gauge # 209 Element # 35334 Range 2000lbs Time Mode 1min

Type Tool Test Depth 1473' - 1522' Zero Point Rotary Table

Packer Depth 1473' Tail Pipe Depth 1522' Top Gauge Depth 1428'

Bottom Hole Temp. 94°F Atmos. Temp. Bottom Gauge Depth 1511'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	0148	12/10/74	Initial Hydrostatic Mud	
Packer Set	0218	12/10/74	Initial Draw Down	
Initial Open	0223	12/10/74	Initial Build-Up	
Initial Shut-In	0226	12/10/74	Final Flow	
Start Flow	0301	12/10/74	Final Build-Up	
Final Shut-In	1210	12/10/74	Final Hydrostatic Mud	
Packer Unseated	1210	12/10/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge 2240 2241 2242 Bottom Gauge 2318 2319 2320

Remarks Johnston did not get a good chart off either gauge.

Don Mason
Operator

SP-423

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 42 WITH 1000 LB. ELEMENT.

DEPTH OF GAUGE IS 1428 FT. OUTSIDE D.P.

INSIDE ANNULUS

TEST INTERVAL SURFACE TO 1473

PACKER DEPTH 1473 FT.

INITIAL HYDROSTATIC IS 420.89 PSI.

FINAL HYDROSTATIC IS 424.88 PSI.

GROUND LEVEL REFERENCE IS

551 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                          DATE OF JOB
SPG-11210-S                                                    DECEMBER 9, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
42  RUN NO. 18    DST NO. 21                                  DECEMBER 30, 1974

                                  SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                   TIME     DATE              COMMENTS
     TIME      (PSI)                    HR MIN

     0.000    420.561                   02  26 DEC 09,1974   INITIAL SHUTIN
      .016    420.584                   02  27 DEC 09,1974
      .032    420.584                   02  28 DEC 09,1974
      .048    420.584                   02  29 DEC 09,1974
      .065    420.607                   02  30 DEC 09,1974
      .081    420.607                   02  31 DEC 09,1974
      .097    420.607                   02  32 DEC 09,1974
      .113    420.652                   02  33 DEC 09,1974
      .129    420.675                   02  34 DEC 09,1974
      .145    420.698                   02  35 DEC 09,1974
      .161    420.698                   02  36 DEC 09,1974
      .177    420.720                   02  37 DEC 09,1974
      .194    420.743                   02  38 DEC 09,1974
      .210    420.766                   02  39 DEC 09,1974
      .226    420.766                   02  40 DEC 09,1974
      .242    420.789                   02  41 DEC 09,1974
      .258    420.812                   02  41 DEC 09,1974
      .274    420.812                   02  42 DEC 09,1974
      .290    420.834                   02  43 DEC 09,1974
      .306    420.834                   02  44 DEC 09,1974
      .323    420.834                   02  45 DEC 09,1974
      .339    420.880                   02  46 DEC 09,1974
      .355    420.857                   02  47 DEC 09,1974
      .371    420.903                   02  48 DEC 09,1974
      .387    420.925                   02  49 DEC 09,1974
      .403    420.948                   02  50 DEC 09,1974
      .419    420.948                   02  51 DEC 09,1974
      .435    420.994                   02  52 DEC 09,1974
      .452    420.994                   02  53 DEC 09,1974
      .468    421.016                   02  54 DEC 09,1974
      .484    420.880                   02  55 DEC 09,1974
      .500    420.812                   02  56 DEC 09,1974   END SHUTIN
```

```
                         32 POINTS REPORTED THIS RUN

                                   PAGE  2
```

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST. NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	420.812	03	01	DEC 09,1974	START FLOW
.016	420.948	03	02	DEC 09,1974	
.033	421.085	03	03	DEC 09,1974	
.049	421.153	03	04	DEC 09,1974	
.065	421.221	03	05	DEC 09,1974	
.082	421.267	03	06	DEC 09,1974	
.098	421.312	03	07	DEC 09,1974	
.114	421.312	03	08	DEC 09,1974	
.131	421.312	03	09	DEC 09,1974	
.147	421.335	03	10	DEC 09,1974	
.163	421.335	03	11	DEC 09,1974	
.180	421.358	03	12	DEC 09,1974	
.196	421.381	03	13	DEC 09,1974	
.212	421.403	03	14	DEC 09,1974	
.229	421.403	03	15	DEC 09,1974	
.245	421.449	03	16	DEC 09,1974	
.261	421.449	03	17	DEC 09,1974	
.278	421.449	03	18	DEC 09,1974	
.294	421.494	03	19	DEC 09,1974	
.310	421.494	03	20	DEC 09,1974	
.327	421.494	03	21	DEC 09,1974	
.343	421.517	03	22	DEC 09,1974	
.359	421.540	03	23	DEC 09,1974	
.376	421.563	03	24	DEC 09,1974	
.392	421.563	03	25	DEC 09,1974	
.408	421.585	03	25	DEC 09,1974	
.425	421.608	03	26	DEC 09,1974	
.441	421.608	03	27	DEC 09,1974	
.457	421.631	03	28	DEC 09,1974	
.474	421.676	03	29	DEC 09,1974	
.490	421.654	03	30	DEC 09,1974	
.506	421.676	03	31	DEC 09,1974	
.523	421.699	03	32	DEC 09,1974	
.539	421.722	03	33	DEC 09,1974	
.555	421.722	03	34	DEC 09,1974	
.572	421.745	03	35	DEC 09,1974	
.588	421.768	03	36	DEC 09,1974	
.604	421.790	03	37	DEC 09,1974	
.621	421.790	03	38	DEC 09,1974	
.637	421.813	03	39	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
.653	421.836	03	40	DEC 09,1974	
.670	421.836	03	41	DEC 09,1974	
.686	421.859	03	42	DEC 09,1974	
.702	421.881	03	43	DEC 09,1974	
.719	421.881	03	44	DEC 09,1974	
.735	421.881	03	45	DEC 09,1974	
.751	421.927	03	46	DEC 09,1974	
.768	421.950	03	47	DEC 09,1974	
.784	421.950	03	48	DEC 09,1974	
.800	421.950	03	49	DEC 09,1974	
.817	421.995	03	50	DEC 09,1974	
.833	422.018	03	51	DEC 09,1974	
.849	421.995	03	52	DEC 09,1974	
.866	422.018	03	53	DEC 09,1974	
.882	422.041	03	54	DEC 09,1974	
.898	422.041	03	55	DEC 09,1974	
.915	422.063	03	56	DEC 09,1974	
.931	422.063	03	57	DEC 09,1974	
.947	422.086	03	58	DEC 09,1974	
.964	422.109	03	59	DEC 09,1974	
.980	422.109	04	00	DEC 09,1974	
.996	422.132	04	01	DEC 09,1974	
1.013	422.132	04	02	DEC 09,1974	
1.029	422.154	04	03	DEC 09,1974	
1.045	422.154	04	04	DEC 09,1974	
1.062	422.177	04	05	DEC 09,1974	
1.078	422.177	04	06	DEC 09,1974	
1.094	422.200	04	07	DEC 09,1974	
1.111	422.200	04	08	DEC 09,1974	
1.127	422.223	04	09	DEC 09,1974	
1.143	422.223	04	10	DEC 09,1974	
1.160	422.268	04	11	DEC 09,1974	
1.176	422.268	04	12	DEC 09,1974	
1.192	422.291	04	13	DEC 09,1974	
1.209	422.291	04	14	DEC 09,1974	
1.225	422.337	04	14	DEC 09,1974	
1.241	422.359	04	15	DEC 09,1974	
1.258	422.314	04	16	DEC 09,1974	
1.274	422.337	04	17	DEC 09,1974	
1.290	422.359	04	18	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.307	422.382	04	19	DEC 09,1974	
1.323	422.382	04	20	DEC 09,1974	
1.339	422.428	04	21	DEC 09,1974	
1.356	422.428	04	22	DEC 09,1974	
1.372	422.428	04	23	DEC 09,1974	
1.388	422.428	04	24	DEC 09,1974	
1.405	422.473	04	25	DEC 09,1974	
1.421	422.496	04	26	DEC 09,1974	
1.437	422.473	04	27	DEC 09,1974	
1.454	422.519	04	28	DEC 09,1974	
1.470	422.541	04	29	DEC 09,1974	
1.486	422.519	04	30	DEC 09,1974	
1.503	422.519	04	31	DEC 09,1974	
1.519	422.541	04	32	DEC 09,1974	
1.535	422.564	04	33	DEC 09,1974	
1.552	422.564	04	34	DEC 09,1974	
1.568	422.587	04	35	DEC 09,1974	
1.584	422.587	04	36	DEC 09,1974	
1.601	422.632	04	37	DEC 09,1974	
1.617	422.632	04	38	DEC 09,1974	
1.633	422.655	04	39	DEC 09,1974	
1.650	422.678	04	40	DEC 09,1974	
1.666	422.701	04	41	DEC 09,1974	
1.682	422.701	04	42	DEC 09,1974	
1.699	422.701	04	43	DEC 09,1974	
1.715	422.723	04	44	DEC 09,1974	
1.731	422.769	04	45	DEC 09,1974	
1.748	422.769	04	46	DEC 09,1974	
1.764	422.769	04	47	DEC 09,1974	
1.780	422.769	04	48	DEC 09,1974	
1.797	422.792	04	49	DEC 09,1974	
1.813	422.792	04	50	DEC 09,1974	
1.829	422.815	04	51	DEC 09,1974	
1.846	422.837	04	52	DEC 09,1974	
1.862	422.860	04	53	DEC 09,1974	
1.878	422.860	04	54	DEC 09,1974	
1.895	422.860	04	55	DEC 09,1974	
1.911	422.860	04	56	DEC 09,1974	
1.927	422.906	04	57	DEC 09,1974	
1.944	422.906	04	58	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.960	422.928	04	59	DEC 09,1974	
1.976	422.928	05	00	DEC 09,1974	
1.993	422.974	05	01	DEC 09,1974	
2.009	422.951	05	02	DEC 09,1974	
2.025	422.974	05	03	DEC 09,1974	
2.042	422.928	05	03	DEC 09,1974	
2.058	422.997	05	04	DEC 09,1974	
2.074	422.997	05	05	DEC 09,1974	
2.091	423.019	05	06	DEC 09,1974	
2.107	423.019	05	07	DEC 09,1974	
2.123	422.997	05	08	DEC 09,1974	
2.140	423.019	05	09	DEC 09,1974	
2.156	423.042	05	10	DEC 09,1974	
2.172	423.042	05	11	DEC 09,1974	
2.189	423.019	05	12	DEC 09,1974	
2.205	423.088	05	13	DEC 09,1974	
2.221	423.065	05	14	DEC 09,1974	
2.238	423.110	05	15	DEC 09,1974	
2.254	423.133	05	16	DEC 09,1974	
2.270	423.133	05	17	DEC 09,1974	
2.287	423.156	05	18	DEC 09,1974	
2.303	423.156	05	19	DEC 09,1974	
2.319	423.201	05	20	DEC 09,1974	
2.336	423.201	05	21	DEC 09,1974	
2.352	423.224	05	22	DEC 09,1974	
2.368	423.201	05	23	DEC 09,1974	
2.385	423.224	05	24	DEC 09,1974	
2.401	423.247	05	25	DEC 09,1974	
2.417	423.247	05	26	DEC 09,1974	
2.434	423.270	05	27	DEC 09,1974	
2.450	423.293	05	28	DEC 09,1974	
2.466	423.293	05	29	DEC 09,1974	
2.483	423.293	05	30	DEC 09,1974	
2.499	423.315	05	31	DEC 09,1974	
2.515	423.315	05	32	DEC 09,1974	
2.532	423.338	05	33	DEC 09,1974	
2.548	423.361	05	34	DEC 09,1974	
2.564	423.361	05	35	DEC 09,1974	
2.581	423.384	05	36	DEC 09,1974	
2.597	423.384	05	37	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
2.613	423.361	05	38	DEC 09,1974	
2.630	423.384	05	39	DEC 09,1974	
2.646	423.406	05	40	DEC 09,1974	
2.662	423.452	05	41	DEC 09,1974	
2.679	423.429	05	42	DEC 09,1974	
2.695	423.452	05	43	DEC 09,1974	
2.711	423.497	05	44	DEC 09,1974	
2.728	423.497	05	45	DEC 09,1974	
2.744	423.520	05	46	DEC 09,1974	
2.760	423.497	05	47	DEC 09,1974	
2.777	423.497	05	48	DEC 09,1974	
2.793	423.520	05	49	DEC 09,1974	
2.809	423.543	05	50	DEC 09,1974	
2.826	423.543	05	51	DEC 09,1974	
2.842	423.543	05	52	DEC 09,1974	
2.858	423.543	05	52	DEC 09,1974	
2.875	423.543	05	53	DEC 09,1974	
2.891	423.543	05	54	DEC 09,1974	
2.907	423.588	05	55	DEC 09,1974	
2.924	423.588	05	56	DEC 09,1974	
2.940	423.611	05	57	DEC 09,1974	
2.956	423.588	05	58	DEC 09,1974	
2.973	423.634	05	59	DEC 09,1974	
2.989	423.634	06	00	DEC 09,1974	
3.005	423.657	06	01	DEC 09,1974	
3.022	423.657	06	02	DEC 09,1974	
3.038	423.657	06	03	DEC 09,1974	
3.054	423.679	06	04	DEC 09,1974	
3.071	423.702	06	05	DEC 09,1974	
3.087	423.702	06	06	DEC 09,1974	
3.103	423.702	06	07	DEC 09,1974	START JETTING
3.120	423.884	06	08	DEC 09,1974	
3.136	423.748	06	09	DEC 09,1974	
3.152	423.748	06	10	DEC 09,1974	
3.169	423.793	06	11	DEC 09,1974	
3.185	423.793	06	12	DEC 09,1974	
3.201	423.793	06	13	DEC 09,1974	
3.218	423.816	06	14	DEC 09,1974	
3.234	423.839	06	15	DEC 09,1974	
3.250	423.862	06	16	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
3.267	423.839	06 17	DEC 09,1974	
3.283	423.884	06 18	DEC 09,1974	
3.299	423.884	06 19	DEC 09,1974	
3.316	423.862	06 20	DEC 09,1974	
3.332	423.884	06 21	DEC 09,1974	
3.348	423.930	06 22	DEC 09,1974	
3.365	423.953	06 23	DEC 09,1974	
3.381	423.930	06 24	DEC 09,1974	
3.397	423.930	06 25	DEC 09,1974	
3.414	423.884	06 26	DEC 09,1974	
3.430	423.975	06 27	DEC 09,1974	
3.446	423.998	06 28	DEC 09,1974	
3.463	423.975	06 29	DEC 09,1974	
3.479	424.021	06 30	DEC 09,1974	
3.495	423.998	06 31	DEC 09,1974	
3.512	424.021	06 32	DEC 09,1974	
3.528	424.021	06 33	DEC 09,1974	
3.544	424.021	06 34	DEC 09,1974	
3.561	424.066	06 35	DEC 09,1974	
3.577	424.044	06 36	DEC 09,1974	
3.593	424.044	06 37	DEC 09,1974	
3.610	424.089	06 38	DEC 09,1974	
3.626	424.089	06 39	DEC 09,1974	
3.642	424.112	06 40	DEC 09,1974	
3.659	424.112	06 41	DEC 09,1974	
3.675	424.112	06 41	DEC 09,1974	
3.691	424.112	06 42	DEC 09,1974	
3.708	424.135	06 43	DEC 09,1974	
3.724	424.135	06 44	DEC 09,1974	
3.740	424.157	06 45	DEC 09,1974	
3.757	424.157	06 46	DEC 09,1974	
3.773	424.135	06 47	DEC 09,1974	
3.789	424.180	06 48	DEC 09,1974	
3.806	424.226	06 49	DEC 09,1974	
3.822	424.203	06 50	DEC 09,1974	
3.838	424.203	06 51	DEC 09,1974	
3.855	424.226	06 52	DEC 09,1974	
3.871	424.248	06 53	DEC 09,1974	
3.887	424.248	06 54	DEC 09,1974	
3.904	424.248	06 55	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
3.920	424.271	06 56	DEC 09,1974	
3.936	424.294	06 57	DEC 09,1974	
3.953	424.294	06 58	DEC 09,1974	
3.969	424.317	06 59	DEC 09,1974	
3.985	424.294	07 00	DEC 09,1974	
4.002	424.340	07 01	DEC 09,1974	
4.018	424.317	07 02	DEC 09,1974	
4.034	424.317	07 03	DEC 09,1974	
4.051	424.340	07 04	DEC 09,1974	
4.067	424.362	07 05	DEC 09,1974	
4.083	424.362	07 06	DEC 09,1974	
4.100	424.362	07 07	DEC 09,1974	END JETTING
4.116	424.362	07 08	DEC 09,1974	
4.132	424.408	07 09	DEC 09,1974	
4.149	424.385	07 10	DEC 09,1974	
4.165	424.385	07 11	DEC 09,1974	
4.181	424.408	07 12	DEC 09,1974	
4.198	424.408	07 13	DEC 09,1974	
4.214	424.453	07 14	DEC 09,1974	
4.230	424.476	07 15	DEC 09,1974	
4.247	424.476	07 16	DEC 09,1974	
4.263	424.499	07 17	DEC 09,1974	
4.279	424.476	07 18	DEC 09,1974	
4.296	424.499	07 19	DEC 09,1974	
4.312	424.499	07 20	DEC 09,1974	
4.328	424.544	07 21	DEC 09,1974	
4.345	424.544	07 22	DEC 09,1974	
4.361	424.544	07 23	DEC 09,1974	
4.377	424.544	07 24	DEC 09,1974	
4.394	424.544	07 25	DEC 09,1974	
4.410	424.567	07 26	DEC 09,1974	
4.426	424.567	07 27	DEC 09,1974	
4.443	424.567	07 28	DEC 09,1974	
4.459	424.590	07 29	DEC 09,1974	
4.475	424.613	07 30	DEC 09,1974	
4.492	424.613	07 30	DEC 09,1974	
4.508	424.613	07 31	DEC 09,1974	
4.524	424.613	07 32	DEC 09,1974	
4.541	424.613	07 33	DEC 09,1974	
4.557	424.613	07 34	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
4.573	424.658	07	35	DEC 09,1974	
4.590	424.681	07	36	DEC 09,1974	
4.606	424.681	07	37	DEC 09,1974	
4.622	424.681	07	38	DEC 09,1974	
4.639	424.681	07	39	DEC 09,1974	
4.655	424.681	07	40	DEC 09,1974	
4.671	424.681	07	41	DEC 09,1974	
4.688	424.681	07	42	DEC 09,1974	
4.704	424.681	07	43	DEC 09,1974	
4.720	424.749	07	44	DEC 09,1974	
4.737	424.749	07	45	DEC 09,1974	
4.753	424.749	07	46	DEC 09,1974	
4.769	424.749	07	47	DEC 09,1974	
4.786	424.726	07	48	DEC 09,1974	
4.802	424.795	07	49	DEC 09,1974	
4.818	424.795	07	50	DEC 09,1974	
4.835	424.795	07	51	DEC 09,1974	
4.851	424.772	07	52	DEC 09,1974	
4.867	424.818	07	53	DEC 09,1974	
4.884	424.818	07	54	DEC 09,1974	
4.900	424.818	07	55	DEC 09,1974	
4.916	424.840	07	56	DEC 09,1974	
4.933	424.840	07	57	DEC 09,1974	
4.949	424.863	07	58	DEC 09,1974	
4.965	424.863	07	59	DEC 09,1974	
4.982	424.909	08	00	DEC 09,1974	
4.998	424.909	08	01	DEC 09,1974	
5.014	424.909	08	02	DEC 09,1974	
5.031	424.909	08	03	DEC 09,1974	
5.047	424.931	08	04	DEC 09,1974	
5.063	424.931	08	05	DEC 09,1974	
5.080	424.954	08	06	DEC 09,1974	
5.096	424.954	08	07	DEC 09,1974	
5.112	424.954	08	08	DEC 09,1974	
5.129	424.954	08	09	DEC 09,1974	
5.145	424.954	08	10	DEC 09,1974	
5.161	425.000	08	11	DEC 09,1974	
5.178	425.000	08	12	DEC 09,1974	
5.194	425.000	08	13	DEC 09,1974	
5.210	425.022	08	14	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
5.227	425.022	08	15	DEC 09,1974	
5.243	425.022	08	16	DEC 09,1974	
5.259	425.022	08	17	DEC 09,1974	
5.276	425.045	08	18	DEC 09,1974	
5.292	425.045	08	19	DEC 09,1974	
5.308	425.091	08	19	DEC 09,1974	
5.325	425.091	08	20	DEC 09,1974	
5.341	425.091	08	21	DEC 09,1974	
5.357	425.091	08	22	DEC 09,1974	
5.374	425.159	08	23	DEC 09,1974	
5.390	425.136	08	24	DEC 09,1974	
5.406	425.113	08	25	DEC 09,1974	
5.423	425.136	08	26	DEC 09,1974	
5.439	425.136	08	27	DEC 09,1974	
5.455	425.136	08	28	DEC 09,1974	
5.472	425.136	08	29	DEC 09,1974	
5.488	425.159	08	30	DEC 09,1974	
5.504	425.204	08	31	DEC 09,1974	
5.521	425.227	08	32	DEC 09,1974	
5.537	425.182	08	33	DEC 09,1974	
5.553	425.227	08	34	DEC 09,1974	
5.570	425.227	08	35	DEC 09,1974	
5.586	425.227	08	36	DEC 09,1974	
5.602	425.227	08	37	DEC 09,1974	
5.619	425.250	08	38	DEC 09,1974	
5.635	425.250	08	39	DEC 09,1974	
5.651	425.250	08	40	DEC 09,1974	
5.668	425.250	08	41	DEC 09,1974	
5.684	425.295	08	42	DEC 09,1974	
5.700	425.295	08	43	DEC 09,1974	
5.717	425.295	08	44	DEC 09,1974	
5.733	425.295	08	45	DEC 09,1974	21 GPM ANNULUS
5.749	425.318	08	46	DEC 09,1974	
5.766	425.318	08	47	DEC 09,1974	
5.782	425.933	08	48	DEC 09,1974	
5.798	426.456	08	49	DEC 09,1974	
5.815	426.820	08	50	DEC 09,1974	
5.831	427.207	08	51	DEC 09,1974	
5.847	427.936	08	52	DEC 09,1974	
5.864	428.710	08	53	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
5.880	429.301	08	54	DEC 09,1974	
5.896	429.734	08	55	DEC 09,1974	
5.913	430.053	08	56	DEC 09,1974	
5.929	430.348	08	57	DEC 09,1974	
5.945	430.576	08	58	DEC 09,1974	
5.962	430.758	08	59	DEC 09,1974	
5.978	430.872	09	00	DEC 09,1974	
5.994	431.031	09	01	DEC 09,1974	
6.011	431.077	09	02	DEC 09,1974	
6.027	431.236	09	03	DEC 09,1974	
6.043	431.282	09	04	DEC 09,1974	
6.060	431.327	09	05	DEC 09,1974	39 GPM ANNULUS
6.076	431.464	09	06	DEC 09,1974	
6.092	433.103	09	07	DEC 09,1974	
6.109	434.400	09	08	DEC 09,1974	
6.125	435.310	09	08	DEC 09,1974	
6.141	435.993	09	09	DEC 09,1974	
6.158	436.562	09	10	DEC 09,1974	
6.174	437.086	09	11	DEC 09,1974	
6.190	437.473	09	12	DEC 09,1974	
6.207	437.837	09	13	DEC 09,1974	
6.223	438.110	09	14	DEC 09,1974	
6.239	438.292	09	15	DEC 09,1974	
6.256	438.429	09	16	DEC 09,1974	
6.272	437.973	09	17	DEC 09,1974	
6.288	436.631	09	18	DEC 09,1974	
6.305	435.197	09	19	DEC 09,1974	
6.321	434.104	09	20	DEC 09,1974	
6.337	433.490	09	21	DEC 09,1974	
6.354	432.943	09	22	DEC 09,1974	
6.370	432.397	09	23	DEC 09,1974	
6.386	431.965	09	24	DEC 09,1974	
6.403	431.578	09	25	DEC 09,1974	61 GPM ANNULUS
6.419	431.487	09	26	DEC 09,1974	
6.435	432.351	09	27	DEC 09,1974	
6.452	434.354	09	28	DEC 09,1974	
6.468	436.198	09	29	DEC 09,1974	
6.484	437.700	09	30	DEC 09,1974	
6.501	438.793	09	31	DEC 09,1974	
6.517	439.681	09	32	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.533	440.477	09	33	DEC 09,1974	
6.550	441.115	09	34	DEC 09,1974	
6.566	441.684	09	35	DEC 09,1974	
6.582	442.048	09	36	DEC 09,1974	
6.599	442.617	09	37	DEC 09,1974	
6.615	442.981	09	38	DEC 09,1974	
6.631	443.368	09	39	DEC 09,1974	
6.648	443.687	09	40	DEC 09,1974	
6.664	443.960	09	41	DEC 09,1974	
6.680	444.142	09	42	DEC 09,1974	
6.697	444.347	09	43	DEC 09,1974	
6.713	444.551	09	44	DEC 09,1974	
6.729	444.825	09	45	DEC 09,1974	DECLINE
6.746	442.480	09	46	DEC 09,1974	
6.762	439.066	09	47	DEC 09,1974	
6.778	436.517	09	48	DEC 09,1974	
6.795	434.628	09	49	DEC 09,1974	
6.811	433.080	09	50	DEC 09,1974	
6.827	431.965	09	51	DEC 09,1974	
6.844	431.054	09	52	DEC 09,1974	
6.860	430.348	09	53	DEC 09,1974	
6.876	429.779	09	54	DEC 09,1974	
6.893	429.279	09	55	DEC 09,1974	
6.909	428.960	09	56	DEC 09,1974	
6.925	428.664	09	57	DEC 09,1974	
6.942	428.391	09	57	DEC 09,1974	
6.958	428.209	09	58	DEC 09,1974	
6.974	428.027	09	59	DEC 09,1974	
6.991	427.913	10	00	DEC 09,1974	
7.007	427.822	10	01	DEC 09,1974	
7.023	427.663	10	02	DEC 09,1974	
7.040	427.594	10	03	DEC 09,1974	
7.056	427.526	10	04	DEC 09,1974	
7.072	427.435	10	05	DEC 09,1974	
7.089	427.367	10	06	DEC 09,1974	
7.105	427.367	10	07	DEC 09,1974	
7.121	427.298	10	08	DEC 09,1974	
7.138	427.298	10	09	DEC 09,1974	
7.154	427.230	10	10	DEC 09,1974	
7.170	427.207	10	11	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.187	427.185	10	12	DEC 09,1974	
7.203	427.116	10	13	DEC 09,1974	
7.219	427.116	10	14	DEC 09,1974	
7.236	427.071	10	15	DEC 09,1974	END DECLINE
7.252	427.048	10	16	DEC 09,1974	
7.268	427.003	10	17	DEC 09,1974	
7.285	427.025	10	18	DEC 09,1974	
7.301	426.980	10	19	DEC 09,1974	
7.317	427.003	10	20	DEC 09,1974	2 GPM INSIDE
7.334	426.980	10	21	DEC 09,1974	DRILL PIPE
7.350	426.980	10	22	DEC 09,1974	
7.366	426.980	10	23	DEC 09,1974	
7.383	426.980	10	24	DEC 09,1974	
7.399	426.980	10	25	DEC 09,1974	
7.415	426.934	10	26	DEC 09,1974	
7.432	426.934	10	27	DEC 09,1974	
7.448	426.912	10	28	DEC 09,1974	
7.464	426.912	10	29	DEC 09,1974	
7.481	426.866	10	30	DEC 09,1974	
7.497	426.866	10	31	DEC 09,1974	
7.513	426.866	10	32	DEC 09,1974	
7.530	426.866	10	33	DEC 09,1974	
7.546	426.889	10	34	DEC 09,1974	
7.562	426.889	10	35	DEC 09,1974	
7.579	426.912	10	36	DEC 09,1974	
7.595	426.889	10	37	DEC 09,1974	
7.611	426.889	10	38	DEC 09,1974	
7.628	426.889	10	39	DEC 09,1974	
7.644	426.889	10	40	DEC 09,1974	5 GPM INSIDE
7.660	426.866	10	41	DEC 09,1974	DRILL PIPE
7.677	426.889	10	42	DEC 09,1974	
7.693	426.889	10	43	DEC 09,1974	
7.709	426.889	10	44	DEC 09,1974	
7.726	426.889	10	45	DEC 09,1974	
7.742	426.866	10	46	DEC 09,1974	
7.758	426.889	10	46	DEC 09,1974	
7.775	426.866	10	47	DEC 09,1974	
7.791	426.934	10	48	DEC 09,1974	
7.807	426.912	10	49	DEC 09,1974	
7.824	426.934	10	50	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
42 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
7.840	426.980	10 51	DEC 09,1974	
7.856	426.912	10 52	DEC 09,1974	
7.873	426.912	10 53	DEC 09,1974	
7.889	426.889	10 54	DEC 09,1974	
7.905	426.866	10 55	DEC 09,1974	
7.922	426.889	10 56	DEC 09,1974	
7.938	426.889	10 57	DEC 09,1974	
7.954	426.889	10 58	DEC 09,1974	
7.971	426.889	10 59	DEC 09,1974	
7.987	426.934	11 00	DEC 09,1974	11 GPM INSIDE
8.003	426.912	11 01	DEC 09,1974	DRILL PIPE
8.020	426.912	11 02	DEC 09,1974	
8.036	426.866	11 03	DEC 09,1974	
8.052	426.934	11 04	DEC 09,1974	
8.069	426.912	11 05	DEC 09,1974	
8.085	426.912	11 06	DEC 09,1974	OVERFLOW
8.101	426.912	11 07	DEC 09,1974	8 GPM INSIDE
8.118	426.934	11 08	DEC 09,1974	DRILL PIPE
8.134	426.912	11 09	DEC 09,1974	
8.150	426.912	11 10	DEC 09,1974	
8.167	426.934	11 11	DEC 09,1974	
8.183	426.912	11 12	DEC 09,1974	
8.199	426.912	11 13	DEC 09,1974	
8.216	426.912	11 14	DEC 09,1974	
8.232	426.934	11 15	DEC 09,1974	
8.248	426.934	11 16	DEC 09,1974	
8.265	426.934	11 17	DEC 09,1974	
8.281	426.957	11 18	DEC 09,1974	
8.297	426.980	11 19	DEC 09,1974	
8.314	426.980	11 20	DEC 09,1974	
8.330	426.957	11 21	DEC 09,1974	
8.346	426.980	11 22	DEC 09,1974	
8.363	426.980	11 23	DEC 09,1974	
8.379	426.980	11 24	DEC 09,1974	
8.395	426.980	11 25	DEC 09,1974	END 8 GPM
8.412	427.094	11 26	DEC 09,1974	
8.428	427.003	11 27	DEC 09,1974	
8.444	427.025	11 28	DEC 09,1974	
8.461	427.025	11 29	DEC 09,1974	
8.477	427.071	11 30	DEC 09,1974	

```
JOB NUMBER                                                     DATE OF JOB
SPG-11210-S                                              DECEMBER  9, 1974

GAUGE/RUN NUMBER                                               DATE OF RUN
42 RUN NO. 18  DST NO. 21                               DECEMBER 18, 1974

                               SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT


   DELTA    PRESSURE                   TIME     DATE            COMMENTS
   TIME      (PSI)                   HR MIN

   8.493     427.094                 11  31 DEC 09,1974
   8.510     427.094                 11  32 DEC 09,1974
   8.526     427.071                 11  33 DEC 09,1974
   8.542     427.116                 11  34 DEC 09,1974
   8.559     427.071                 11  35 DEC 09,1974
   8.575     427.116                 11  35 DEC 09,1974
   8.591     427.139                 11  36 DEC 09,1974
   8.608     427.162                 11  37 DEC 09,1974
   8.624     427.162                 11  38 DEC 09,1974
   8.640     427.094                 11  39 DEC 09,1974
   8.657     427.048                 11  40 DEC 09,1974
   8.673     427.071                 11  41 DEC 09,1974
   8.689     427.116                 11  42 DEC 09,1974
   8.706     427.116                 11  43 DEC 09,1974
   8.722     427.071                 11  44 DEC 09,1974
   8.738     427.048                 11  45 DEC 09,1974
   8.755     427.071                 11  46 DEC 09,1974
   8.771     427.094                 11  47 DEC 09,1974
   8.787     427.094                 11  48 DEC 09,1974
   8.804     427.094                 11  49 DEC 09,1974
   8.820     427.116                 11  50 DEC 09,1974
   8.836     427.094                 11  51 DEC 09,1974
   8.853     427.139                 11  52 DEC 09,1974
   8.869     427.139                 11  53 DEC 09,1974
   8.885     427.139                 11  54 DEC 09,1974
   8.902     427.139                 11  55 DEC 09,1974
   8.918     427.116                 11  56 DEC 09,1974
   8.934     427.116                 11  57 DEC 09,1974
   8.951     427.116                 11  58 DEC 09,1974
   8.967     427.071                 11  59 DEC 09,1974
   8.983     427.116                 12  00 DEC 09,1974   END TEST
```

```
                        551 POINTS REPORTED THIS RUN
```

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 209 WITH 2000 LB. ELEMENT.

DEPTH OF GAUGE 1511 FT. INSIDE D.P.

TEST INTERVAL 1473 TO 1522 FT.

SET PACKER DEPTH 1473 FT.

INITIAL HYDROSTATIC IS 351.98 PSI

FINAL HYDROSTATIC IS 348.99 PSI.

GROUND LEVEL REFERENCE IS 7036 FT.

31 POINTS REPORTED THIS JOB

PAGE 1 OF 2 PAGES

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
0.000	96.225	02	26	DEC 09,1974	INITIAL SHUTIN
.017	206.701	02	27	DEC 09,1974	
.033	316.885	02	28	DEC 09,1974	
.050	392.619	02	29	DEC 09,1974	
.067	407.223	02	30	DEC 09,1974	
.083	430.792	02	31	DEC 09,1974	
.100	441.946	02	32	DEC 09,1974	
.117	448.319	02	33	DEC 09,1974	
.133	452.490	02	34	DEC 09,1974	
.150	455.162	02	35	DEC 09,1974	
.167	457.317	02	36	DEC 09,1974	
.183	458.864	02	37	DEC 09,1974	
.200	460.223	02	38	DEC 09,1974	
.217	461.301	02	39	DEC 09,1974	
.233	462.191	02	40	DEC 09,1974	
.250	462.894	02	41	DEC 09,1974	
.267	463.551	02	42	DEC 09,1974	
.283	464.066	02	43	DEC 09,1974	
.300	464.441	02	44	DEC 09,1974	
.317	464.863	02	45	DEC 09,1974	
.333	465.191	02	46	DEC 09,1974	
.350	465.566	02	47	DEC 09,1974	
.367	465.753	02	48	DEC 09,1974	
.383	465.941	02	49	DEC 09,1974	
.400	466.175	02	50	DEC 09,1974	
.417	466.409	02	51	DEC 09,1974	
.433	466.503	02	52	DEC 09,1974	
.450	466.784	02	53	DEC 09,1974	
.467	466.878	02	54	DEC 09,1974	
.483	467.019	02	55	DEC 09,1974	
.500	467.206	02	56	DEC 09,1974	END SHUTIN

31 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	106.469	03	01	DEC 09,1974	START FLOW
.016	121.277	03	02	DEC 09,1974	
.033	134.992	03	03	DEC 09,1974	
.049	146.366	03	04	DEC 09,1974	
.066	155.400	03	05	DEC 09,1974	
.082	163.732	03	06	DEC 09,1974	
.099	171.548	03	07	DEC 09,1974	
.115	176.931	03	08	DEC 09,1974	
.131	181.799	03	09	DEC 09,1974	
.148	186.714	03	10	DEC 09,1974	
.164	192.471	03	11	DEC 09,1974	
.181	197.012	03	12	DEC 09,1974	
.197	201.318	03	13	DEC 09,1974	
.213	207.262	03	14	DEC 09,1974	
.230	211.756	03	15	DEC 09,1974	
.246	215.500	03	16	DEC 09,1974	
.263	220.041	03	17	DEC 09,1974	
.279	224.487	03	18	DEC 09,1974	
.296	228.700	03	19	DEC 09,1974	
.312	233.100	03	20	DEC 09,1974	
.328	237.359	03	21	DEC 09,1974	
.345	241.572	03	22	DEC 09,1974	
.361	245.832	03	23	DEC 09,1974	
.378	249.717	03	24	DEC 09,1974	
.394	253.508	03	25	DEC 09,1974	
.411	257.299	03	26	DEC 09,1974	
.427	261.091	03	27	DEC 09,1974	
.443	264.882	03	28	DEC 09,1974	
.460	268.627	03	29	DEC 09,1974	
.476	272.044	03	30	DEC 09,1974	
.493	275.695	03	31	DEC 09,1974	
.509	278.971	03	32	DEC 09,1974	
.526	282.341	03	33	DEC 09,1974	
.542	285.899	03	34	DEC 09,1974	
.558	289.362	03	35	DEC 09,1974	
.575	292.686	03	35	DEC 09,1974	
.591	296.102	03	36	DEC 09,1974	
.608	299.426	03	37	DEC 09,1974	
.624	302.749	03	38	DEC 09,1974	
.640	305.932	03	39	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.657	308.834	03	40	DEC 09,1974	
.673	311.923	03	41	DEC 09,1974	
.690	315.013	03	42	DEC 09,1974	
.706	318.008	03	43	DEC 09,1974	
.723	320.770	03	44	DEC 09,1974	
.739	323.672	03	45	DEC 09,1974	
.755	326.480	03	46	DEC 09,1974	
.772	329.148	03	47	DEC 09,1974	
.788	332.191	03	48	DEC 09,1974	
.805	334.906	03	49	DEC 09,1974	
.821	337.574	03	50	DEC 09,1974	
.838	340.195	03	51	DEC 09,1974	
.854	342.816	03	52	DEC 09,1974	
.870	345.297	03	53	DEC 09,1974	
.887	347.871	03	54	DEC 09,1974	
.903	350.118	03	55	DEC 09,1974	
.920	352.505	03	56	DEC 09,1974	
.936	354.658	03	57	DEC 09,1974	
.953	356.999	03	58	DEC 09,1974	
.969	359.199	03	59	DEC 09,1974	
.985	361.305	04	00	DEC 09,1974	
1.002	363.552	04	01	DEC 09,1974	
1.018	365.752	04	02	DEC 09,1974	
1.035	367.764	04	03	DEC 09,1974	
1.051	369.730	04	04	DEC 09,1974	
1.067	371.790	04	05	DEC 09,1974	
1.084	373.709	04	06	DEC 09,1974	
1.100	375.675	04	07	DEC 09,1974	
1.117	377.500	04	08	DEC 09,1974	
1.133	379.513	04	09	DEC 09,1974	
1.150	381.338	04	10	DEC 09,1974	
1.166	383.164	04	11	DEC 09,1974	
1.182	384.943	04	12	DEC 09,1974	
1.199	386.768	04	13	DEC 09,1974	
1.215	388.594	04	14	DEC 09,1974	
1.232	390.138	04	15	DEC 09,1974	
1.248	391.917	04	16	DEC 09,1974	
1.265	393.555	04	17	DEC 09,1974	
1.281	395.287	04	18	DEC 09,1974	
1.297	396.832	04	19	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1,314	398,423	04	20	DEC 09,1974	
1,330	400,108	04	21	DEC 09,1974	
1,347	401,606	04	22	DEC 09,1974	
1,363	403,197	04	23	DEC 09,1974	
1,380	404,789	04	24	DEC 09,1974	
1,396	406,287	04	25	DEC 09,1974	
1,412	407,691	04	26	DEC 09,1974	
1,429	409,142	04	27	DEC 09,1974	
1,445	410,406	04	28	DEC 09,1974	
1,462	411,811	04	29	DEC 09,1974	
1,478	413,123	04	30	DEC 09,1974	
1,494	414,389	04	31	DEC 09,1974	
1,511	415,560	04	32	DEC 09,1974	
1,527	416,919	04	33	DEC 09,1974	
1,544	418,185	04	34	DEC 09,1974	
1,560	419,309	04	35	DEC 09,1974	
1,577	420,434	04	36	DEC 09,1974	
1,593	421,559	04	37	DEC 09,1974	
1,609	422,543	04	38	DEC 09,1974	
1,626	423,715	04	39	DEC 09,1974	
1,642	424,699	04	40	DEC 09,1974	
1,659	425,730	04	41	DEC 09,1974	
1,675	426,620	04	42	DEC 09,1974	
1,692	427,558	04	42	DEC 09,1974	
1,708	428,495	04	43	DEC 09,1974	
1,724	429,432	04	44	DEC 09,1974	
1,741	430,417	04	45	DEC 09,1974	
1,757	431,307	04	46	DEC 09,1974	
1,774	432,244	04	47	DEC 09,1974	
1,790	433,182	04	48	DEC 09,1974	
1,807	433,932	04	49	DEC 09,1974	
1,823	434,728	04	50	DEC 09,1974	
1,839	435,525	04	51	DEC 09,1974	
1,856	436,369	04	52	DEC 09,1974	
1,872	437,072	04	53	DEC 09,1974	
1,889	437,821	04	54	DEC 09,1974	
1,905	438,337	04	55	DEC 09,1974	
1,921	439,274	04	56	DEC 09,1974	
1,938	440,118	04	57	DEC 09,1974	
1,954	440,727	04	58	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
1.971	441.711	04 59	DEC 09,1974	
1.987	442.039	05 00	DEC 09,1974	
2.004	442.836	05 01	DEC 09,1974	
2.020	443.305	05 02	DEC 09,1974	
2.036	443.914	05 03	DEC 09,1974	
2.053	444.476	05 04	DEC 09,1974	
2.069	445.132	05 05	DEC 09,1974	
2.086	445.695	05 06	DEC 09,1974	
2.102	446.304	05 07	DEC 09,1974	
2.119	446.866	05 08	DEC 09,1974	
2.135	447.382	05 09	DEC 09,1974	
2.151	447.897	05 10	DEC 09,1974	
2.168	448.413	05 11	DEC 09,1974	
2.184	449.022	05 12	DEC 09,1974	
2.201	449.397	05 13	DEC 09,1974	
2.217	449.960	05 14	DEC 09,1974	
2.234	450.334	05 15	DEC 09,1974	
2.250	450.803	05 16	DEC 09,1974	
2.266	451.178	05 17	DEC 09,1974	
2.283	451.647	05 18	DEC 09,1974	
2.299	452.209	05 19	DEC 09,1974	
2.316	452.631	05 20	DEC 09,1974	
2.332	453.662	05 21	DEC 09,1974	
2.348	453.849	05 22	DEC 09,1974	
2.365	454.552	05 23	DEC 09,1974	
2.381	455.162	05 24	DEC 09,1974	
2.398	455.630	05 25	DEC 09,1974	
2.414	455.958	05 26	DEC 09,1974	
2.431	456.614	05 27	DEC 09,1974	
2.447	458.114	05 28	DEC 09,1974	
2.463	457.599	05 29	DEC 09,1974	
2.480	458.395	05 30	DEC 09,1974	
2.496	458.442	05 31	DEC 09,1974	
2.513	459.098	05 32	DEC 09,1974	
2.529	459.192	05 33	DEC 09,1974	
2.546	459.801	05 34	DEC 09,1974	
2.562	459.989	05 35	DEC 09,1974	
2.578	460.645	05 36	DEC 09,1974	
2.595	460.739	05 37	DEC 09,1974	
2.611	460.926	05 38	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.628	461.160	05	39	DEC 09,1974	
2.644	461.114	05	40	DEC 09,1974	
2.661	461.676	05	41	DEC 09,1974	
2.677	461.817	05	42	DEC 09,1974	
2.693	461.863	05	43	DEC 09,1974	
2.710	462.051	05	44	DEC 09,1974	
2.726	462.098	05	45	DEC 09,1974	
2.743	462.238	05	46	DEC 09,1974	
2.759	462.566	05	47	DEC 09,1974	
2.775	462.754	05	48	DEC 09,1974	
2.792	462.941	05	49	DEC 09,1974	
2.808	462.848	05	49	DEC 09,1974	
2.825	462.941	05	50	DEC 09,1974	
2.841	463.082	05	51	DEC 09,1974	
2.858	463.223	05	52	DEC 09,1974	
2.874	463.176	05	53	DEC 09,1974	
2.890	463.269	05	54	DEC 09,1974	
2.907	463.504	05	55	DEC 09,1974	
2.923	463.316	05	56	DEC 09,1974	
2.940	463.551	05	57	DEC 09,1974	
2.956	463.457	05	58	DEC 09,1974	
2.973	463.551	05	59	DEC 09,1974	
2.989	463.597	06	00	DEC 09,1974	
3.005	463.691	06	01	DEC 09,1974	
3.022	464.019	06	02	DEC 09,1974	
3.038	464.066	06	03	DEC 09,1974	
3.055	515.946	06	04	DEC 09,1974	
3.071	496.310	06	05	DEC 09,1974	
3.088	418.653	06	06	DEC 09,1974	
3.104	404.414	06	07	DEC 09,1974	START JETTING
3.120	399.734	06	08	DEC 09,1974	
3.137	397.347	06	09	DEC 09,1974	
3.153	396.176	06	10	DEC 09,1974	
3.170	395.334	06	11	DEC 09,1974	
3.186	394.866	06	12	DEC 09,1974	
3.202	394.538	06	13	DEC 09,1974	
3.219	394.257	06	14	DEC 09,1974	
3.235	393.976	06	15	DEC 09,1974	
3.252	393.789	06	16	DEC 09,1974	
3.268	393.649	06	17	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
3.285	394.070	06	18	DEC 09,1974	
3.301	394.398	06	19	DEC 09,1974	
3.317	394.070	06	20	DEC 09,1974	
3.334	393.976	06	21	DEC 09,1974	
3.350	393.930	06	22	DEC 09,1974	
3.367	393.836	06	23	DEC 09,1974	
3.383	393.930	06	24	DEC 09,1974	
3.400	393.649	06	25	DEC 09,1974	
3.416	393.649	06	26	DEC 09,1974	
3.432	393.602	06	27	DEC 09,1974	
3.449	393.462	06	28	DEC 09,1974	
3.465	393.415	06	29	DEC 09,1974	
3.482	393.181	06	30	DEC 09,1974	
3.498	393.415	06	31	DEC 09,1974	
3.515	393.228	06	32	DEC 09,1974	
3.531	393.040	06	33	DEC 09,1974	
3.547	392.993	06	34	DEC 09,1974	
3.564	392.900	06	35	DEC 09,1974	
3.580	392.713	06	36	DEC 09,1974	
3.597	392.479	06	37	DEC 09,1974	
3.613	392.291	06	38	DEC 09,1974	
3.629	392.245	06	39	DEC 09,1974	
3.646	392.385	06	40	DEC 09,1974	
3.662	392.338	06	41	DEC 09,1974	
3.679	392.245	06	42	DEC 09,1974	
3.695	392.291	06	43	DEC 09,1974	
3.712	392.291	06	44	DEC 09,1974	
3.728	392.245	06	45	DEC 09,1974	
3.744	392.151	06	46	DEC 09,1974	
3.761	392.104	06	47	DEC 09,1974	
3.777	392.151	06	48	DEC 09,1974	
3.794	392.245	06	49	DEC 09,1974	
3.810	392.198	06	50	DEC 09,1974	
3.827	392.245	06	51	DEC 09,1974	
3.843	392.151	06	52	DEC 09,1974	
3.859	392.151	06	53	DEC 09,1974	
3.876	392.151	06	54	DEC 09,1974	
3.892	392.151	06	55	DEC 09,1974	
3.909	392.104	06	56	DEC 09,1974	
3.925	392.057	06	57	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
3.941	391.964	06	57	DEC 09,1974	
3.958	392.057	06	58	DEC 09,1974	
3.974	392.011	06	59	DEC 09,1974	
3.991	391.964	07	00	DEC 09,1974	
4.007	391.776	07	01	DEC 09,1974	
4.024	391.964	07	02	DEC 09,1974	
4.040	391.964	07	03	DEC 09,1974	
4.056	392.011	07	04	DEC 09,1974	
4.073	391.964	07	05	DEC 09,1974	
4.089	392.011	07	06	DEC 09,1974	
4.106	366.126	07	07	DEC 09,1974	END JETTING
4.122	365.237	07	08	DEC 09,1974	
4.139	368.607	07	09	DEC 09,1974	
4.155	372.164	07	10	DEC 09,1974	
4.171	375.254	07	11	DEC 09,1974	
4.188	378.296	07	12	DEC 09,1974	
4.204	380.028	07	13	DEC 09,1974	
4.221	382.789	07	14	DEC 09,1974	
4.237	384.662	07	15	DEC 09,1974	
4.254	386.347	07	16	DEC 09,1974	
4.270	388.219	07	17	DEC 09,1974	
4.286	390.232	07	18	DEC 09,1974	
4.303	392.151	07	19	DEC 09,1974	
4.319	394.117	07	20	DEC 09,1974	
4.336	395.989	07	21	DEC 09,1974	
4.352	397.861	07	22	DEC 09,1974	
4.368	399.640	07	23	DEC 09,1974	
4.385	401.232	07	24	DEC 09,1974	
4.401	402.917	07	25	DEC 09,1974	
4.418	404.602	07	26	DEC 09,1974	
4.434	406.287	07	27	DEC 09,1974	
4.451	407.878	07	28	DEC 09,1974	
4.467	409.516	07	29	DEC 09,1974	
4.483	410.874	07	30	DEC 09,1974	
4.500	412.373	07	31	DEC 09,1974	
4.516	413.779	07	32	DEC 09,1974	
4.533	415.185	07	33	DEC 09,1974	
4.549	416.498	07	34	DEC 09,1974	
4.566	417.763	07	35	DEC 09,1974	
4.582	419.122	07	36	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
4.598	420.341	07	37	DEC 09,1974	
4.615	421.559	07	38	DEC 09,1974	
4.631	422.731	07	39	DEC 09,1974	
4.648	423.902	07	40	DEC 09,1974	
4.664	424.933	07	41	DEC 09,1974	
4.681	426.011	07	42	DEC 09,1974	
4.697	427.042	07	43	DEC 09,1974	
4.713	428.073	07	44	DEC 09,1974	
4.730	429.151	07	45	DEC 09,1974	
4.746	430.042	07	46	DEC 09,1974	
4.763	431.073	07	47	DEC 09,1974	
4.779	432.010	07	48	DEC 09,1974	
4.795	432.994	07	49	DEC 09,1974	
4.812	433.978	07	50	DEC 09,1974	
4.828	434.681	07	51	DEC 09,1974	
4.845	435.572	07	52	DEC 09,1974	
4.861	436.322	07	53	DEC 09,1974	
4.878	437.259	07	54	DEC 09,1974	
4.894	438.103	07	55	DEC 09,1974	
4.910	438.899	07	56	DEC 09,1974	
4.927	439.696	07	57	DEC 09,1974	
4.943	440.399	07	58	DEC 09,1974	
4.960	441.102	07	59	DEC 09,1974	
4.976	441.946	08	00	DEC 09,1974	
4.993	442.649	08	01	DEC 09,1974	
5.009	443.305	08	02	DEC 09,1974	
5.025	444.148	08	03	DEC 09,1974	
5.042	444.804	08	04	DEC 09,1974	
5.058	445.507	08	04	DEC 09,1974	
5.075	445.882	08	05	DEC 09,1974	
5.091	446.679	08	06	DEC 09,1974	
5.108	447.335	08	07	DEC 09,1974	
5.124	447.523	08	08	DEC 09,1974	
5.140	448.272	08	09	DEC 09,1974	
5.157	448.741	08	10	DEC 09,1974	
5.173	449.585	08	11	DEC 09,1974	
5.190	450.194	08	12	DEC 09,1974	
5.206	450.475	08	13	DEC 09,1974	
5.222	450.944	08	14	DEC 09,1974	
5.239	451.553	08	15	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.255	452.022	08	16	DEC 09,1974	
5.272	452.115	08	17	DEC 09,1974	
5.288	452.865	08	18	DEC 09,1974	
5.305	452.959	08	19	DEC 09,1974	
5.321	453.381	08	20	DEC 09,1974	
5.337	453.756	08	21	DEC 09,1974	
5.354	454.084	08	22	DEC 09,1974	
5.370	454.318	08	23	DEC 09,1974	
5.387	454.646	08	24	DEC 09,1974	
5.403	454.927	08	25	DEC 09,1974	
5.420	455.490	08	26	DEC 09,1974	
5.436	455.630	08	27	DEC 09,1974	
5.452	455.958	08	28	DEC 09,1974	
5.469	456.286	08	29	DEC 09,1974	
5.485	456.521	08	30	DEC 09,1974	
5.502	456.849	08	31	DEC 09,1974	
5.518	457.177	08	32	DEC 09,1974	
5.535	457.458	08	33	DEC 09,1974	
5.551	457.786	08	34	DEC 09,1974	
5.567	457.974	08	35	DEC 09,1974	
5.584	458.208	08	36	DEC 09,1974	
5.600	458.489	08	37	DEC 09,1974	
5.617	458.677	08	38	DEC 09,1974	
5.633	458.958	08	39	DEC 09,1974	
5.649	459.192	08	40	DEC 09,1974	
5.666	459.380	08	41	DEC 09,1974	
5.682	459.520	08	42	DEC 09,1974	
5.699	459.801	08	43	DEC 09,1974	
5.715	459.942	08	44	DEC 09,1974	
5.732	460.083	08	45	DEC 09,1974	
5.748	460.317	08	46	DEC 09,1974	21 GPM ANNULUS
5.764	460.645	08	47	DEC 09,1974	
5.781	460.785	08	48	DEC 09,1974	
5.797	460.973	08	49	DEC 09,1974	
5.814	461.207	08	50	DEC 09,1974	
5.830	461.348	08	51	DEC 09,1974	
5.847	461.535	08	52	DEC 09,1974	
5.863	461.629	08	53	DEC 09,1974	
5.879	461.817	08	54	DEC 09,1974	
5.896	462.285	08	55	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.912	462.051	08	56	DEC 09,1974	
5.929	462.145	08	57	DEC 09,1974	
5.945	462.332	08	58	DEC 09,1974	
5.962	462.473	08	59	DEC 09,1974	
5.978	462.613	09	00	DEC 09,1974	
5.994	462.707	09	01	DEC 09,1974	
6.011	462.848	09	02	DEC 09,1974	
6.027	462.941	09	03	DEC 09,1974	
6.044	462.988	09	04	DEC 09,1974	
6.060	463.176	09	05	DEC 09,1974	39 G/M ANNULUS
6.076	463.223	09	06	DEC 09,1974	
6.093	463.269	09	07	DEC 09,1974	
6.109	463.504	09	08	DEC 09,1974	
6.126	463.738	09	09	DEC 09,1974	
6.142	463.785	09	10	DEC 09,1974	
6.159	463.832	09	11	DEC 09,1974	
6.175	463.972	09	12	DEC 09,1974	
6.191	464.019	09	12	DEC 09,1974	
6.208	464.160	09	13	DEC 09,1974	
6.224	464.207	09	14	DEC 09,1974	
6.241	464.254	09	15	DEC 09,1974	
6.257	464.394	09	16	DEC 09,1974	
6.274	464.347	09	17	DEC 09,1974	
6.290	464.582	09	18	DEC 09,1974	
6.306	464.675	09	19	DEC 09,1974	
6.323	464.769	09	20	DEC 09,1974	
6.339	465.191	09	21	DEC 09,1974	
6.356	465.050	09	22	DEC 09,1974	
6.372	465.050	09	23	DEC 09,1974	
6.389	465.097	09	24	DEC 09,1974	61 G/M ANNULUS
6.405	465.425	09	25	DEC 09,1974	
6.421	465.191	09	26	DEC 09,1974	
6.438	465.472	09	27	DEC 09,1974	
6.454	465.613	09	28	DEC 09,1974	
6.471	465.706	09	29	DEC 09,1974	
6.487	465.660	09	30	DEC 09,1974	
6.503	465.613	09	31	DEC 09,1974	
6.520	465.847	09	32	DEC 09,1974	
6.536	466.034	09	33	DEC 09,1974	
6.553	466.128	09	34	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.569	465.988	09	35	DEC 09,1974	
6.586	466.128	09	36	DEC 09,1974	
6.602	466.222	09	37	DEC 09,1974	
6.618	466.175	09	38	DEC 09,1974	
6.635	466.269	09	39	DEC 09,1974	
6.651	466.409	09	40	DEC 09,1974	
6.668	466.363	09	41	DEC 09,1974	
6.684	466.316	09	42	DEC 09,1974	
6.701	466.128	09	43	DEC 09,1974	
6.717	466.269	09	44	DEC 09,1974	
6.733	466.363	09	45	DEC 09,1974	DECLINE
6.750	466.363	09	46	DEC 09,1974	
6.766	466.409	09	47	DEC 09,1974	
6.783	466.456	09	48	DEC 09,1974	
6.799	466.550	09	49	DEC 09,1974	
6.816	466.550	09	50	DEC 09,1974	
6.832	466.550	09	51	DEC 09,1974	
6.848	466.644	09	52	DEC 09,1974	
6.865	466.691	09	53	DEC 09,1974	
6.881	466.737	09	54	DEC 09,1974	
6.898	466.691	09	55	DEC 09,1974	
6.914	466.737	09	56	DEC 09,1974	
6.930	466.784	09	57	DEC 09,1974	
6.947	466.737	09	58	DEC 09,1974	
6.963	466.831	09	59	DEC 09,1974	
6.980	466.831	10	00	DEC 09,1974	
6.996	467.159	10	01	DEC 09,1974	
7.013	466.972	10	02	DEC 09,1974	
7.029	466.925	10	03	DEC 09,1974	
7.045	467.019	10	04	DEC 09,1974	
7.062	466.972	10	05	DEC 09,1974	
7.078	467.065	10	06	DEC 09,1974	
7.095	467.112	10	07	DEC 09,1974	
7.111	467.206	10	08	DEC 09,1974	
7.128	467.112	10	09	DEC 09,1974	
7.144	467.300	10	10	DEC 09,1974	
7.160	467.159	10	11	DEC 09,1974	
7.177	467.440	10	12	DEC 09,1974	
7.193	467.300	10	13	DEC 09,1974	
7.210	467.206	10	14	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JO
DECEMBER 9, 197

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RU
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.226	467.253	10	15	DEC 09,1974	END DECLINE
7.243	467.253	10	16	DEC 09,1974	
7.259	467.347	10	17	DEC 09,1974	
7.275	467.394	10	18	DEC 09,1974	
7.292	467.347	10	19	DEC 09,1974	
7.308	471.611	10	19	DEC 09,1974	2 G/M INSIDE
7.325	476.626	10	20	DEC 09,1974	DRILL PIPE
7.341	481.313	10	21	DEC 09,1974	
7.357	485.531	10	22	DEC 09,1974	
7.374	489.514	10	23	DEC 09,1974	
7.390	493.545	10	24	DEC 09,1974	
7.407	497.341	10	25	DEC 09,1974	
7.423	501.043	10	26	DEC 09,1974	
7.440	504.699	10	27	DEC 09,1974	
7.456	508.213	10	28	DEC 09,1974	
7.472	511.822	10	29	DEC 09,1974	
7.489	515.196	10	30	DEC 09,1974	
7.505	518.571	10	31	DEC 09,1974	
7.522	521.898	10	32	DEC 09,1974	
7.538	525.179	10	33	DEC 09,1974	
7.555	528.225	10	34	DEC 09,1974	
7.571	531.224	10	35	DEC 09,1974	
7.587	534.130	10	36	DEC 09,1974	
7.604	536.895	10	37	DEC 09,1974	
7.620	540.738	10	38	DEC 09,1974	
7.637	544.487	10	39	DEC 09,1974	
7.653	548.049	10	40	DEC 09,1974	5 G/M INSIDE
7.670	551.470	10	41	DEC 09,1974	DRILL PIPE
7.686	554.938	10	42	DEC 09,1974	
7.702	558.219	10	43	DEC 09,1974	
7.719	561.546	10	44	DEC 09,1974	
7.735	564.780	10	45	DEC 09,1974	
7.752	568.108	10	46	DEC 09,1974	
7.768	571.248	10	47	DEC 09,1974	
7.784	574.435	10	48	DEC 09,1974	
7.801	577.434	10	49	DEC 09,1974	
7.817	580.480	10	50	DEC 09,1974	
7.834	583.386	10	51	DEC 09,1974	
7.850	586.338	10	52	DEC 09,1974	
7.867	589.103	10	53	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 1974

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.883	591.728	10	54	DEC 09,1974	
7.899	594.306	10	55	DEC 09,1974	
7.916	597.024	10	56	DEC 09,1974	
7.932	604.147	10	57	DEC 09,1974	
7.949	614.364	10	58	DEC 09,1974	
7.965	624.253	10	59	DEC 09,1974	
7.982	634.188	11	00	DEC 09,1974	11 G/M INSIDE
7.998	644.030	11	01	DEC 09,1974	DRILL PIPE
8.014	653.356	11	02	DEC 09,1974	
8.031	657.949	11	03	DEC 09,1974	
8.047	658.839	11	04	DEC 09,1974	
8.064	659.214	11	05	DEC 09,1974	
8.080	659.261	11	06	DEC 09,1974	OVERFLOW
8.096	659.449	11	07	DEC 09,1974	8 G/M INSIDE
8.113	659.496	11	08	DEC 09,1974	DRILL PIPE
8.129	659.589	11	09	DEC 09,1974	
8.146	659.683	11	10	DEC 09,1974	
8.162	659.636	11	11	DEC 09,1974	
8.179	659.636	11	12	DEC 09,1974	
8.195	659.589	11	13	DEC 09,1974	
8.211	659.636	11	14	DEC 09,1974	
8.228	659.589	11	15	DEC 09,1974	
8.244	659.589	11	16	DEC 09,1974	
8.261	659.730	11	17	DEC 09,1974	
8.277	659.542	11	18	DEC 09,1974	
8.294	659.449	11	19	DEC 09,1974	
8.310	659.121	11	20	DEC 09,1974	
8.326	654.247	11	21	DEC 09,1974	
8.343	650.357	11	22	DEC 09,1974	
8.359	646.467	11	23	DEC 09,1974	
8.376	642.577	11	24	DEC 09,1974	
8.392	638.640	11	25	DEC 09,1974	END 8 G/M
8.409	635.032	11	26	DEC 09,1974	
8.425	631.376	11	26	DEC 09,1974	
8.441	627.861	11	27	DEC 09,1974	
8.458	624.487	11	28	DEC 09,1974	
8.474	621.300	11	29	DEC 09,1974	
8.491	617.832	11	30	DEC 09,1974	
8.507	614.458	11	31	DEC 09,1974	
8.523	611.177	11	32	DEC 09,1974	

JOB NUMBER
SPG-11210-S

DATE OF JOB
DECEMBER 9, 197

GAUGE/RUN NUMBER
209 RUN NO. 18 DST NO. 21

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.540	607.803	11	33	DEC 09,1974	
8.556	604.850	11	34	DEC 09,1974	
8.573	601.945	11	35	DEC 09,1974	
8.589	599.320	11	36	DEC 09,1974	
8.606	596.555	11	37	DEC 09,1974	
8.622	593.837	11	38	DEC 09,1974	
8.638	591.306	11	39	DEC 09,1974	
8.655	588.635	11	40	DEC 09,1974	
8.671	586.104	11	41	DEC 09,1974	
8.688	583.480	11	42	DEC 09,1974	
8.704	580.902	11	43	DEC 09,1974	
8.721	578.090	11	44	DEC 09,1974	
8.737	575.840	11	45	DEC 09,1974	
8.753	573.357	11	46	DEC 09,1974	
8.770	570.920	11	47	DEC 09,1974	
8.786	568.998	11	48	DEC 09,1974	
8.803	566.561	11	49	DEC 09,1974	
8.819	564.593	11	50	DEC 09,1974	
8.836	562.390	11	51	DEC 09,1974	
8.852	560.234	11	52	DEC 09,1974	
8.868	558.219	11	53	DEC 09,1974	
8.885	556.298	11	54	DEC 09,1974	
8.901	554.095	11	55	DEC 09,1974	
8.918	552.361	11	56	DEC 09,1974	
8.934	550.346	11	57	DEC 09,1974	
8.950	548.471	11	58	DEC 09,1974	
8.967	546.690	11	59	DEC 09,1974	
8.983	544.956	12	00	DEC 09,1974	END FLOW

548 POINTS REPORTED THIS RUN

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 22
COUNTY RIO BLANCO
STATE COLORADO

JOHNSTON

Schlumberger

technical report

RECEIVED

DEC 23 1974

A. J. ROGERS II B-1038

F.R. #09078 C

JOHNSTON
...found a better way

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	1727	-	-
CLOSED FOR INITIAL SHUT-IN	1732	-	-
FINISHED SHUT-IN	1802	-	-
RE-OPENED TOOL	1808	-	-
WATER INJECTION DOWN ANNULUS			
21 GALLONS PER MIN. FROM	1746	-	-
TO	1806	-	-
39 GALLONS PER MIN. FROM	1806	-	-
TO	1826	-	-
61 GALLONS PER MIN. FROM	1826	-	-
[illegible]	[illegible]	-	-
RECOVERED 20 GAL./MIN.			
WATER INJECTION DOWN DRILL			
PIPE AT 2 GAL/MIN FROM	2115	-	-
TO	2135	-	-
5 GALLONS PER MIN. FROM	2135	-	-
TO	2155	-	-
11 GALLONS PER MIN. FROM	2155	-	-
TO	2215	-	-
21 GALLONS PER MIN. FROM	2215	-	-
TO	2235	-	-
8 GAL./MIN. TO SURFACE			
PULLED PACKER LOOSE	2310	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036' Ft.
Net Productive Interval 94 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1522 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 235' I.D. -
Drill Pipe Length 1151' I.D. -
Packer Depth(s) 1424 & 1428 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure P.S.I.G. at Surface
Recovery: Cu. Ft. Gas
cc. Oil
cc. Water
cc. Mud
Tot. Liquid cc.
Gravity °API @ °F.
Gas/Oil Ratio cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
WATER	459	-				@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING; 1600 GLENARM; DENVER, COLORADO 80202
Company ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S-G #17 Location 436'FWL 181'FSL SEC.16-3S-96W
Test Interval 1428' TO 1522' Test # 22 Date 12-10-74
II B-1039
County RIO BLANCO State COLORADO
Technician BURNS(VERNAL) Test Approved By MR. S. W. BERKHEISER, JR.
Field Report No. 09078 C
No. Reports Requested 14(13x)

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)	1500		
Instrument Depth	1411'		
Instrument Opening	INSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	107		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
[illegible]			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09078 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.007030 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1		411.3		43	155.5		75	372.0	
2		423.4		44	167.2		76	374.7	
3	0	37.6		45	178.2		77	377.3	
4	2	42.5		46	188.4		78	380.0	
	3	412.5		47	199.7		79	382.6	
	4	417.0		48	209.9		80	384.9	
	5	418.5		49	219.4		81	387.1	
	6	419.3		50	229.2		82	389.8	
	7	419.6		51	236.7		83	391.3	
	8	420.4		52	245.8		84	393.2	
	9	420.8		53	254.1		85	395.1	
	10	421.2		54	263.2		86	396.6	
	11	421.5		55	271.1		87	398.5	
	12	421.5		56	277.9		88	400.0	
	13	421.9		57	284.7		89	401.5	
	14	421.9		58	291.9		90	402.3	
	15	421.9		59	298.3		91	403.8	
	16	421.9		60	304.4		92	404.9	
	17	421.9		61	310.8		93	406.0	
	18	422.3		62	316.5		94	407.2	
	19	422.3		63	322.1		95	407.9	
	20	422.3		64	327.1		96	409.1	
	25	422.7		65	332.4		97	409.8	
	30	422.7		66	337.3		98	410.6	
	33	422.7		67	342.2		99	411.3	
	35	423.8		68	346.7		100	412.1	
6	37	424.6		69	351.2		101	412.8	
7	38	60.6		70	354.6	II B-1049	102	413.2	
	39	90.5		71	358.4		103	413.6	
	40	114.3		72	362.2		104	414.4	
	41	129.0		73	365.6		105	414.7	
	42	142.3		74	369.4		CONTINUED		

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			

Field Report No. 09078 C

TIME DATA

					Time Given	Time Computed
Initial Hydrostatic Mud	A					
Initial Shut-in	B				Mins.	Mins.
Initial Flow	C				Mins.	Mins.
					Mins.	Mins.
					Mins.	Mins.
Final Flow	D				Mins.	Mins.
Final Shut-in	E				Mins.	Mins.
Final Hydrostatic Mud	F				Mins.	Mins.

Remarks.

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point inutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
106	415.1		260	491.8				
107	415.5		9 262	496.0				
108	415.9		264	506.2				
109	416.2		266	522.8				
110	416.2		263	536.8				
120	418.5		270	550.0				
130	419.6		272	562.5				
140	420.8		274	575.7				
150	421.9		276	587.1				
160	422.3		278	598.4				
170	423.4		280	604.1				
180	423.8		282	607.1				
190	423.8		284	608.6				
200	423.8		286	610.1				
210	423.8		288	610.9				
220	423.8		290	611.6				
8 227	423.8		292	612.4				
230	432.5		294	613.1				
232	437.4		296	614.3				
234	441.9		298	614.6				
236	446.1		10 300	615.4				
238	449.1		CLOCK STOPPED AT THIS POINT.					
240	452.1							
242	454.8							
244	457.4							
246	461.6							
248	466.5							
250	471.8							
252	476.3							
254	480.9							
256	484.6							
258	488.4							

II B-1041

PRESSURE DATA

Instrument No.		AK-1-5010		
Capacity (P.S.I.G.)		1600		
Instrument Depth		1430'		
Instrument Opening		OUTSIDE		
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.		107		
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09078 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003600 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1		418.4		43	157.5		75	364.8	
2		430.0		44	172.7		76	367.2	
3	0	54.2		45	181.9		77	370.8	
4	2	76.6		46	191.5		78	373.2	
	3	420.0		47	202.3		79	376.8	
	4	422.8		48	209.1		80	379.6	
	5	424.4		49	219.9		81	381.6	
	6	425.2		50	228.3		82	384.0	
	7	426.0		51	235.9		83	385.6	
	8	426.8		52	243.1		84	388.4	
	9	427.2		53	251.9		85	390.4	
	10	427.6		54	260.3		86	392.0	
	11	428.0		55	269.9		87	394.0	
	12	428.0		56	273.5		88	395.6	
	13	428.4		57	280.3		89	397.6	
	14	428.8		58	286.7		90	399.2	
	15	428.8		59	291.1		91	400.4	
	16	428.8		60	298.7		92	402.0	
	17	428.8		61	305.2		93	403.2	
	18	428.8		62	309.2		94	404.8	
	19	429.2		63	315.2		95	406.4	
	20	429.2		64	319.6		96	407.2	
	25	429.6		65	324.8		97	408.4	
	30	429.6		66	330.0		98	409.6	
5	33	429.6		67	335.2		99	410.4	
	35	433.2		68	338.8		100	411.6	
6	37	432.4		69	342.8		101	412.0	
7	38	73.8		70	347.2		102	413.2	
	39	106.7		71	351.2		103	414.4	
	40	129.5		72	354.4		104	415.2	
	41	138.3		73	358.0		105	416.0	
	42	149.1		74	361.6		CONTINUED		

II B-1042

PRESSURE DATA

Instrument No.	AK-1-5010		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09078 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks

Shut in pressure did not reach static reservoir pressure.

Clock Travel ________________ inches per min.

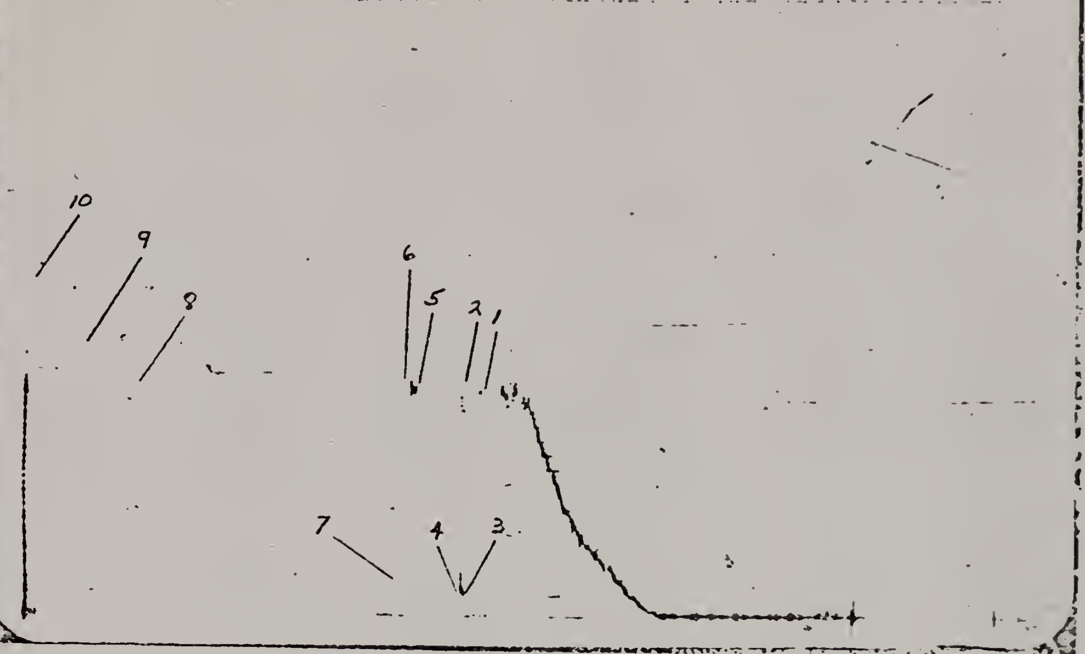
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
106	416.4		260	496.4		324	514.9	
107	416.8		9 262	500.0		326	508.9	
108	417.6		264	515.3		328	504.5	
109	418.0		266	529.7		330	498.0	
110	418.8		268	543.3		332	494.0	
120	422.4		270	557.7		11 334	490.0	
130	424.8		272	570.1		336	449.2	
140	426.0		274	581.7		338	432.4	
150	426.8		276	592.5		340	429.6	
160	427.6		278	604.5		342	428.4	
170	428.4		280	608.9		12 343	428.0	
180	428.8		282	611.3		13	418.0	
190	429.6		284	612.9				
200	430.0		286	614.5				
210	430.0		288	615.7				
220	430.0		290	616.9				
8 227	430.0		292	617.3				
230	436.4		294	618.1				
232	442.4		296	618.9				
234	446.0		298	619.7				
236	450.0		10 300	620.5				
238	453.6		302	612.1				
240	457.2		304	599.3				
242	460.0		306	588.9				
244	463.6		308	578.9				
246	466.8		310	568.5				
248	471.6		312	558.9				
250	476.4		314	549.3				
252	481.2		316	543.3				
254	485.2		318	534.5				
256	488.8		320	528.1				
258	492.4		322	521.3				

II B-1043

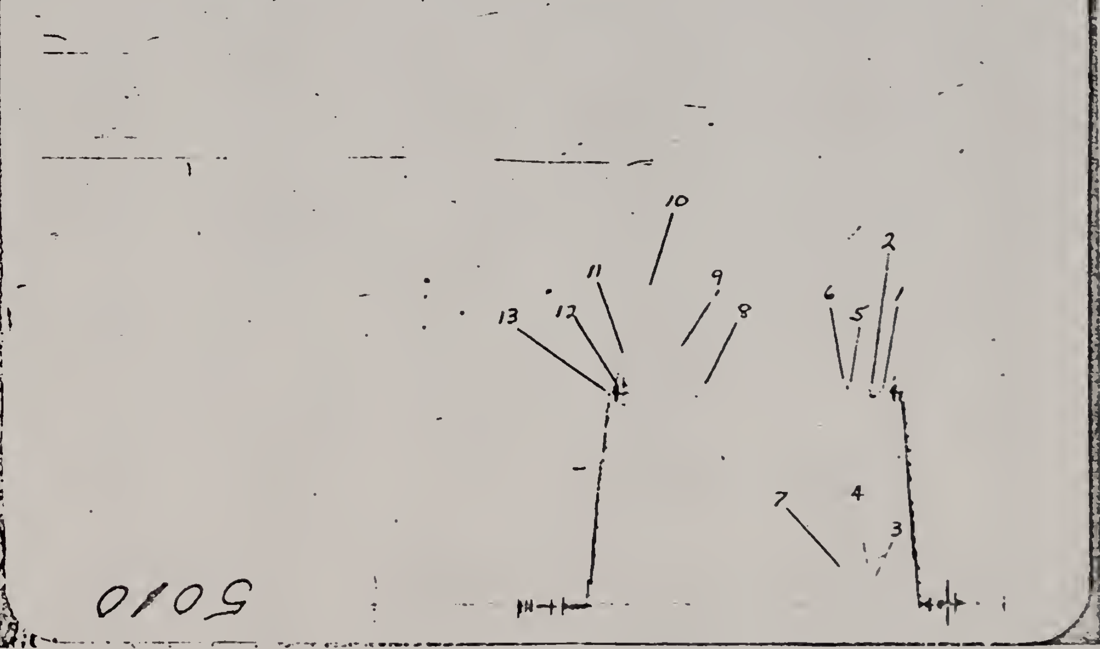
JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09078 C	AK-1-5009
CAPACITY	**REPORTS REQUESTED**
1500#	14+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09078 C	AK-1-5010
CAPACITY	**REPORTS REQUESTED**
1600#	14+



sperry-sun

POST OFFICE BOX 36363 HOUSTON, TEXAS 77036 (713) 494-3021

J. A. Fouché
President

DST 22
1428 – 1

January 7, 1975

Mr. Frederick R. Scheerer
Atlantic-Richfield Company
1500 Security Life Building
Denver, Colorado 80202

Dear Sir:

Enclosed is the original of our Precision Pressure Gauge Drill Stem Test Job SPG-11210-T, performed on your Federal SG-17 Well, Tract C-b, Piceance Creek Basin, Sorghum Gulch, Rio Blanco County, Colorado on December 10, 1974.

Also enclosed are the charts for gauge numbers 42 and 209 with Field Data Sheet.

Distribution is being made according to the attached mailing list.

Thank you for this opportunity to be of service.

Very truly yours,

Carl Kisinger, Jr.

Carl Kisinger, Jr.
Manager, Pressure Services

CK:jg
Enclosures

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210T Date 12/10/74 Run 1 Office Casper

Customer Arco Et Al Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio Blanco

Well Sorghum Gulch No. 17 Field Tract Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 1433	12/10/74	2.		
Depart: Well/~~Dock~~	1. 0200	12/11/74	2.		11hr 27min Hrs.
Gauge Start in Hole	1. 1506	12/10/74	2. 1542	12/10/74	
Gauge Out of Hole	1. not working	12/11/74	2. 0054	12/11/74	Hrs.

No. Trips 0 Miles 0 Total Mileage on Location

Top Gauge # 42 Element # 32761 Range 1000 lbs. Time Mode 1 min

Btm. Gauge # 209 Element # 35334 Range 2000 lbs Time Mode 1 min.

Type Tool ______ Test Depth 1428'-1522' Zero Point Rotary Table

Packer Depth 1428' Tail Pipe Depth 1522' Top Gauge Depth 1384'

Bottom Hole Temp. 94°F Atmos. Temp. ______ Bottom Gauge Depth 1439'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	1656	12/10/74	Initial Hydrostatic Mud	
Packer Set	1724	12/10/74	Initial Draw Down	
Initial Open	1728	12/10/74	Initial Build-Up	
Initial Shut-In	1729	12/10/74	Final Flow	
Start Flow	1808	12/10/74	Final Build-Up	
Final Shut-In	2308	12/10/74	Final Hydrostatic Mud	
Packer Unseated	2311	12/10/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge 1506 1507 1508 Bottom Gauge 1542 1543 1544

Remarks Problem Inside Gauge Run 50 Min. After Gauge Started In Hole

Don D. Mason
Operator

SP-423

II B-1046

JOB NUMBER
SPG-11210-T

DATE OF JC
DECEMBER 10, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 42 WITH 1000 LB. ELEMENT

GAUGE DEPTH IS 1384 FT. OUTSIDE D.P.

INSIDE ANNULUS

TEST INTERVAL SURFACE TO 1428 FT.

SET PACKER DEPTH IS 1428 FT.

INITIAL HYDROSTATIC IS 401,91 PSI.

FINAL HYDROSTATIC IS 404.72 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

GAUGE 209 INSIDE D.P. RAN

50 MINUTES AFTER STARTING IN HOLE BEFORE MALFUNCTION.

304 POINTS REPORTED THIS JOB

JOB NUMBER
SPG-11210-T

DATE OF J
DECEMBER 10, 197

GAUGE/RUN NUMBER
42 RUN NO, 19 DST NO, 22

DATE OF R
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
0.000	411.004	18	08	DEC 10,1974	START FLOW
.017	410.981	18	09	DEC 10,1974	
.033	410.935	18	10	DEC 10,1974	
.050	410.935	18	11	DEC 10,1974	
.066	410.912	18	12	DEC 10,1974	
.083	410.889	18	13	DEC 10,1974	
.099	410.935	18	14	DEC 10,1974	
.116	410.935	18	15	DEC 10,1974	
.132	410.958	18	16	DEC 10,1974	
.149	410.958	18	17	DEC 10,1974	
.165	410.958	18	18	DEC 10,1974	
.182	410.958	18	19	DEC 10,1974	
.198	410.981	18	20	DEC 10,1974	
.215	410.981	18	21	DEC 10,1974	
.231	410.958	18	22	DEC 10,1974	
.248	410.935	18	23	DEC 10,1974	
.264	410.958	18	24	DEC 10,1974	
.281	410.981	18	25	DEC 10,1974	
.297	411.004	18	26	DEC 10,1974	
.314	410.981	18	27	DEC 10,1974	
.330	411.004	18	28	DEC 10,1974	
.347	411.027	18	29	DEC 10,1974	
.363	411.050	18	30	DEC 10,1974	
.380	411.050	18	31	DEC 10,1974	
.396	411.072	18	32	DEC 10,1974	
.413	411.050	18	33	DEC 10,1974	
.429	411.072	18	34	DEC 10,1974	
.446	411.050	18	35	DEC 10,1974	
.462	411.095	18	36	DEC 10,1974	
.479	411.072	18	37	DEC 10,1974	
.495	411.118	18	38	DEC 10,1974	
.512	411.072	18	39	DEC 10,1974	
.528	411.095	18	40	DEC 10,1974	
.545	411.095	18	41	DEC 10,1974	
.561	411.118	18	42	DEC 10,1974	
.578	411.118	18	43	DEC 10,1974	
.594	411.141	18	44	DEC 10,1974	
.611	411.163	18	45	DEC 10,1974	
.627	411.163	18	46	DEC 10,1974	
.644	411.186	18	47	DEC 10,1974	

```
JOB NUMBER                                                                 DATE OF J
SPG-11210-T                                                          DECEMBER 10, 19

GAUGE/RUN NUMBER                                                           DATE OF R
42 RUN NO. 19  DST NO. 22                                            DECEMBER 18, 19

                                  SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                        TIME      DATE                 COMMENTS
    TIME      (PSI)                        HR MIN

     .660    411.209                       18   48 DEC 10,1974
     .677    411.255                       18   49 DEC 10,1974
     .693    411.277                       18   50 DEC 10,1974
     .710    411.255                       18   51 DEC 10,1974
     .726    411.255                       18   52 DEC 10,1974
     .743    411.277                       18   53 DEC 10,1974
     .759    411.300                       18   54 DEC 10,1974
     .776    411.300                       18   55 DEC 10,1974
     .792    411.346                       18   56 DEC 10,1974
     .809    411.346                       18   57 DEC 10,1974
     .825    411.323                       18   58 DEC 10,1974
     .842    411.368                       18   58 DEC 10,1974
     .858    411.391                       18   59 DEC 10,1974
     .875    411.414                       19   00 DEC 10,1974
     .891    411.414                       19   01 DEC 10,1974
     .908    411.437                       19   02 DEC 10,1974
     .924    411.368                       19   03 DEC 10,1974
     .941    411.437                       19   04 DEC 10,1974
     .957    411.414                       19   05 DEC 10,1974
     .974    411.391                       19   06 DEC 10,1974
     .990    411.437                       19   07 DEC 10,1974
    1.007    411.414                       19   08 DEC 10,1974
    1.023    411.437                       19   09 DEC 10,1974
    1.040    411.460                       19   10 DEC 10,1974
    1.056    411.482                       19   11 DEC 10,1974
    1.073    411.482                       19   12 DEC 10,1974
    1.089    411.460                       19   13 DEC 10,1974
    1.106    411.460                       19   14 DEC 10,1974
    1.122    411.482                       19   15 DEC 10,1974
    1.139    411.505                       19   16 DEC 10,1974
    1.155    411.505                       19   17 DEC 10,1974
    1.172    411.482                       19   18 DEC 10,1974
    1.188    411.482                       19   19 DEC 10,1974
    1.205    411.505                       19   20 DEC 10,1974
    1.221    411.505                       19   21 DEC 10,1974
    1.238    411.505                       19   22 DEC 10,1974
    1.254    411.528                       19   23 DEC 10,1974
    1.271    411.551                       19   24 DEC 10,1974
    1.287    411.528                       19   25 DEC 10,1974
    1.304    411.528                       19   26 DEC 10,1974
```

JOB NUMBER
SPG-11210-T

DATE OF J
DECEMBER 10, 19

GAUGE/RUN NUMBER
42 RUN NO. 19 DST NO. 22

DATE OF R
DECEMBER 13, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
1.320	411.551	19	27	DEC 10,1974	
1.337	411.551	19	28	DEC 10,1974	
1.353	411.551	19	29	DEC 10,1974	
1.370	411.551	19	30	DEC 10,1974	
1.386	411.528	19	31	DEC 10,1974	
1.403	411.573	19	32	DEC 10,1974	
1.419	411.573	19	33	DEC 10,1974	
1.436	411.573	19	34	DEC 10,1974	
1.452	411.596	19	35	DEC 10,1974	
1.469	411.573	19	36	DEC 10,1974	
1.485	411.596	19	37	DEC 10,1974	
1.502	411.596	19	38	DEC 10,1974	
1.518	411.619	19	39	DEC 10,1974	
1.535	411.619	19	40	DEC 10,1974	
1.551	411.619	19	41	DEC 10,1974	
1.568	411.619	19	42	DEC 10,1974	
1.584	411.642	19	43	DEC 10,1974	
1.601	411.619	19	44	DEC 10,1974	
1.617	411.642	19	45	DEC 10,1974	
1.634	411.665	19	46	DEC 10,1974	21 G/M ANNULUS
1.650	411.687	19	47	DEC 10,1974	
1.667	411.687	19	48	DEC 10,1974	
1.683	412.621	19	49	DEC 10,1974	
1.700	413.282	19	50	DEC 10,1974	
1.716	413.738	19	51	DEC 10,1974	
1.733	414.079	19	52	DEC 10,1974	
1.749	414.375	19	53	DEC 10,1974	
1.766	414.581	19	54	DEC 10,1974	
1.782	414.717	19	55	DEC 10,1974	
1.799	414.854	19	56	DEC 10,1974	
1.815	414.968	19	57	DEC 10,1974	
1.832	415.150	19	58	DEC 10,1974	
1.848	415.196	19	59	DEC 10,1974	
1.865	415.241	20	00	DEC 10,1974	
1.881	415.310	20	01	DEC 10,1974	
1.898	415.355	20	02	DEC 10,1974	
1.914	415.423	20	03	DEC 10,1974	
1.931	415.446	20	04	DEC 10,1974	
1.947	415.492	20	05	DEC 10,1974	
1.964	415.537	20	06	DEC 10,1974	39 G/M ANNULUS

JOB NUMBER
SPG-11210-T

DATE OF
DECEMBER 10, 19

GAUGE/RUN NUMBER
42 RUN NO. 19 DST NO. 22

DATE OF
DECEMBER 18, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
1.980	416.107	20	07	DEC 10,1974	
1.997	417.041	20	08	DEC 10,1974	
2.013	418.248	20	09	DEC 10,1974	
2.030	418.681	20	10	DEC 10,1974	
2.046	419.068	20	11	DEC 10,1974	
2.063	419.410	20	12	DEC 10,1974	
2.079	419.661	20	13	DEC 10,1974	
2.096	419.775	20	14	DEC 10,1974	
2.112	420.093	20	15	DEC 10,1974	
2.129	420.230	20	16	DEC 10,1974	
2.145	420.367	20	17	DEC 10,1974	
2.162	420.481	20	18	DEC 10,1974	
2.178	420.595	20	19	DEC 10,1974	
2.195	420.709	20	20	DEC 10,1974	
2.211	420.800	20	21	DEC 10,1974	
2.228	420.868	20	22	DEC 10,1974	
2.244	420.914	20	23	DEC 10,1974	
2.261	421.050	20	24	DEC 10,1974	
2.277	422.326	20	25	DEC 10,1974	
2.294	423.351	20	26	DEC 10,1974	61 G/M ANNULUS
2.310	424.148	20	27	DEC 10,1974	
2.327	424.877	20	28	DEC 10,1974	
2.343	425.401	20	29	DEC 10,1974	
2.360	425.880	20	30	DEC 10,1974	
2.376	426.267	20	31	DEC 10,1974	
2.393	426.677	20	32	DEC 10,1974	
2.409	426.973	20	33	DEC 10,1974	
2.426	427.224	20	34	DEC 10,1974	
2.442	427.543	20	35	DEC 10,1974	
2.459	427.793	20	36	DEC 10,1974	
2.475	427.907	20	37	DEC 10,1974	
2.492	428.226	20	38	DEC 10,1974	
2.508	428.545	20	38	DEC 10,1974	
2.525	428.773	20	39	DEC 10,1974	
2.541	428.955	20	40	DEC 10,1974	
2.558	429.160	20	41	DEC 10,1974	
2.574	429.342	20	42	DEC 10,1974	
2.591	429.411	20	43	DEC 10,1974	
2.607	427.133	20	44	DEC 10,1974	
2.624	424.399	20	45	DEC 10,1974	

```
JOB NUMBER                                                                    DATE OF
SPG-11210-T                                                           DECEMBER 10, 19

GAUGE/RUN NUMBER                                                              DATE OF
42 RUN NO. 19  DST NO. 22                                             DECEMBER 13, 19

                                        SPERRY-SUN
                         PRECISION SUBSURFACE PRESSURE GAUGE REPORT


     DELTA     PRESSURE                           TIME      DATE                COMMENTS
     TIME       (PSI)                            HR MIN

     2.640     422.121                           20  46 DEC 10,1974   DECLINE
     2.657     420.435                           20  47 DEC 10,1974
     2.673     419.000                           20  48 DEC 10,1974
     2.690     417.361                           20  49 DEC 10,1974
     2.706     416.859                           20  50 DEC 10,1974
     2.723     415.130                           20  51 DEC 10,1974
     2.739     415.104                           20  52 DEC 10,1974
     2.756     414.740                           20  53 DEC 10,1974
     2.772     414.375                           20  54 DEC 10,1974
     2.789     414.148                           20  55 DEC 10,1974
     2.805     413.965                           20  56 DEC 10,1974
     2.822     413.733                           20  57 DEC 10,1974
     2.838     413.669                           20  58 DEC 10,1974
     2.855     413.555                           20  59 DEC 10,1974
     2.871     413.441                           21  00 DEC 10,1974
     2.888     413.350                           21  01 DEC 10,1974
     2.904     413.282                           21  02 DEC 10,1974
     2.921     413.191                           21  03 DEC 10,1974
     2.937     413.145                           21  04 DEC 10,1974
     2.954     413.077                           21  05 DEC 10,1974
     2.970     413.077                           21  06 DEC 10,1974
     2.987     413.054                           21  07 DEC 10,1974
     3.003     412.986                           21  08 DEC 10,1974
     3.020     412.940                           21  09 DEC 10,1974
     3.036     412.940                           21  10 DEC 10,1974
     3.053     412.918                           21  11 DEC 10,1974
     3.069     412.872                           21  12 DEC 10,1974
     3.086     412.918                           21  13 DEC 10,1974
     3.102     412.872                           21  14 DEC 10,1974
     3.119     412.849                           21  15 DEC 10,1974   2 G/M INSIDE
     3.135     412.826                           21  16 DEC 10,1974   DRILL PIPE
     3.152     412.804                           21  17 DEC 10,1974
     3.168     412.781                           21  18 DEC 10,1974
     3.185     412.758                           21  19 DEC 10,1974
     3.201     412.758                           21  20 DEC 10,1974
     3.218     412.758                           21  21 DEC 10,1974
     3.234     412.735                           21  22 DEC 10,1974
     3.251     412.758                           21  23 DEC 10,1974
     3.267     412.735                           21  24 DEC 10,1974
     3.284     412.735                           21  25 DEC 10,1974
```

JOB NUMBER	DATE OF JC
SPG-11210-T	DECEMBER 10, 197
GAUGE/RUN NUMBER	DATE OF RU
42 RUN NO. 19 DST NO. 22	DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.300	412.735	21	26	DEC 10,1974	
3.317	412.713	21	27	DEC 10,1974	
3.333	412.735	21	28	DEC 10,1974	
3.350	412.735	21	29	DEC 10,1974	
3.366	412.735	21	30	DEC 10,1974	
3.383	412.690	21	31	DEC 10,1974	
3.399	412.713	21	32	DEC 10,1974	
3.416	412.735	21	33	DEC 10,1974	
3.432	412.667	21	34	DEC 10,1974	
3.449	412.713	21	35	DEC 10,1974	5 G/M INSIDE
3.465	412.713	21	36	DEC 10,1974	DRILL PIPE
3.482	412.690	21	37	DEC 10,1974	
3.498	412.690	21	38	DEC 10,1974	
3.515	412.713	21	39	DEC 10,1974	
3.531	412.690	21	40	DEC 10,1974	
3.548	412.713	21	41	DEC 10,1974	
3.564	412.690	21	42	DEC 10,1974	
3.581	412.713	21	43	DEC 10,1974	
3.597	412.713	21	44	DEC 10,1974	
3.614	412.713	21	45	DEC 10,1974	
3.630	412.713	21	46	DEC 10,1974	
3.647	412.735	21	47	DEC 10,1974	
3.663	412.713	21	48	DEC 10,1974	
3.680	412.713	21	49	DEC 10,1974	
3.696	412.735	21	50	DEC 10,1974	
3.713	412.758	21	51	DEC 10,1974	
3.729	412.735	21	52	DEC 10,1974	
3.746	412.758	21	53	DEC 10,1974	
3.762	412.758	21	54	DEC 10,1974	
3.779	412.781	21	55	DEC 10,1974	11 G/M INSIDE
3.795	412.758	21	56	DEC 10,1974	DRILL PIPE
3.812	412.781	21	57	DEC 10,1974	
3.828	412.781	21	58	DEC 10,1974	
3.845	412.781	21	59	DEC 10,1974	
3.861	412.758	22	00	DEC 10,1974	
3.878	412.826	22	01	DEC 10,1974	
3.894	412.804	22	02	DEC 10,1974	
3.911	412.804	22	03	DEC 10,1974	
3.927	412.826	22	04	DEC 10,1974	
3.944	412.781	22	05	DEC 10,1974	

JOB NUMBER
SPG-11210-T

DATE OF
DECEMBER 10, 1

GAUGE/RUN NUMBER
42 RUN NO. 19 DST NO. 22

DATE OF
DECEMBER 18, 1

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.960	412.826	22	06	DEC 10,1974	
3.977	412.826	22	07	DEC 10,1974	
3.993	412.872	22	08	DEC 10,1974	
4.010	412.872	22	09	DEC 10,1974	
4.026	412.872	22	10	DEC 10,1974	
4.043	412.872	22	11	DEC 10,1974	
4.059	412.918	22	12	DEC 10,1974	
4.076	412.895	22	13	DEC 10,1974	
4.092	412.895	22	14	DEC 10,1974	
4.109	412.918	22	15	DEC 10,1974	21 G/M INSIDE
4.125	412.918	22	16	DEC 10,1974	DRILL PIPE
4.142	412.918	22	17	DEC 10,1974	OVERFLOW
4.158	412.895	22	18	DEC 10,1974	
4.175	412.895	22	18	DEC 10,1974	
4.191	412.918	22	19	DEC 10,1974	
4.208	412.895	22	20	DEC 10,1974	
4.224	412.895	22	21	DEC 10,1974	
4.241	412.918	22	22	DEC 10,1974	
4.257	412.918	22	23	DEC 10,1974	
4.274	412.940	22	24	DEC 10,1974	
4.290	412.963	22	25	DEC 10,1974	
4.307	412.940	22	26	DEC 10,1974	
4.323	412.918	22	27	DEC 10,1974	
4.340	412.940	22	28	DEC 10,1974	
4.356	412.963	22	29	DEC 10,1974	
4.373	412.918	22	30	DEC 10,1974	
4.389	412.940	22	31	DEC 10,1974	
4.406	412.963	22	32	DEC 10,1974	
4.422	412.940	22	33	DEC 10,1974	
4.439	412.918	22	34	DEC 10,1974	
4.455	412.918	22	35	DEC 10,1974	DECLINE
4.472	412.918	22	36	DEC 10,1974	
4.488	412.940	22	37	DEC 10,1974	
4.505	412.918	22	38	DEC 10,1974	
4.521	412.918	22	39	DEC 10,1974	
4.538	412.918	22	40	DEC 10,1974	
4.554	412.918	22	41	DEC 10,1974	
4.571	412.940	22	42	DEC 10,1974	
4.587	412.940	22	43	DEC 10,1974	
4.604	412.918	22	44	DEC 10,1974	

JOB NUMBER
SPG-11210-T

DATE OF JC
DECEMBER 10, 197

GAUGE/RUN NUMBER
42 RUN NO. 19 DST NO. 22

DATE OF RL
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
4.620	412.918	22	45	DEC 10,1974	
4.637	412.918	22	46	DEC 10,1974	
4.653	412.918	22	47	DEC 10,1974	
4.670	412.918	22	48	DEC 10,1974	
4.686	412.918	22	49	DEC 10,1974	
4.703	412.918	22	50	DEC 10,1974	
4.719	412.918	22	51	DEC 10,1974	
4.736	412.918	22	52	DEC 10,1974	
4.752	412.940	22	53	DEC 10,1974	
4.769	412.963	22	54	DEC 10,1974	
4.785	412.963	22	55	DEC 10,1974	
4.802	412.986	22	56	DEC 10,1974	
4.818	412.963	22	57	DEC 10,1974	
4.835	412.986	22	58	DEC 10,1974	
4.851	412.940	22	59	DEC 10,1974	
4.868	412.986	23	00	DEC 10,1974	
4.884	412.986	23	01	DEC 10,1974	
4.901	412.986	23	02	DEC 10,1974	
4.917	412.986	23	03	DEC 10,1974	
4.934	412.986	23	04	DEC 10,1974	
4.950	412.986	23	05	DEC 10,1974	
4.967	413.009	23	06	DEC 10,1974	
4.983	413.009	23	07	DEC 10,1974	
5.000	413.009	23	08	DEC 10,1974	END FLOW

304 POINTS REPORTED THIS RUN

JOHNSTON

Schlumberger

technical report

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 23
COUNTY RIO BLANCO
STATE COLORADO

RECEIVED
DEC 23 1974

II B-1056 A. J. ROGERS

F.R. #09079 C

JOHNSTON
...found a better way

SURFACE INFORMATION

Description (Rate of Flow)		Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool		0931	-	-
CLOSED FOR INITIAL SHUT-IN		0933	-	-
FINISHED SHUT-IN		1004	-	-
RE-OPENED TOOL		1009	-	-
STARTED JETTING		1245	-	-
STOPPED JETTING		1345	-	-
3 GAL/MIN.		1350	-	-
WATER INJECTION DOWN				
ANNULUS				
21 GAL/MIN.	FROM	1509	-	-
	TO	1529	-	-
39 GAL/MIN.	FROM	1529	-	-
	TO	1549	-	-
61 GAL/MIN.	FROM	1549	-	-
	TO	1609	-	-
DECLINE	FROM	1609	-	-
	TO	1629	-	-
CLOSED FOR FINAL SHUT-IN		1815	-	-
PULLED PACKER LOOSE		1821	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER - FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 58 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1572 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 297' I.D. -
Drill Pipe Length 1183' I.D. -
Packer Depth(s) 1510' & 1514' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY		CHLORIDE CONTENT
Recovery Water	___ @ ___	°F.	___ ppm
Recovery Mud	___ @ ___	°F.	
Recovery Mud Filtrate	___ @ ___	°F.	___ ppm
Mud Pit Sample	___ @ ___	°F.	
Mud Pit Sample Filtrate	___ @ ___	°F.	___ ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
WATER	451.3	-				@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202
Company ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S-G #17 Location 436' FWL & 181' FSL SEC. 16-3S-96W
Test Interval 1514' TO 1572' Test # 23 Date 12-12-74
II B-1057
County RIO BLANCO State COLORADO
Technician BURNS (VERNAL) Test Approved By MR. CHUCK BERGONZINI
Field Report No. 09079 C
No. Reports Requested 14 (13x)

PRESSURE DATA

Instrument No.		AK-1-5009		
Capacity (P.S.I.G.)		1500		
Instrument Depth		1497'		
Instrument Opening		INSIDE		
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.		110		
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09079 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

INSTRUMENT NUMBER AK-1-5010: CLOCK STOPPED, NO PRESSURES RECORDED.

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.006684 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
	440.1		32	460.8		64	368.3	
2	461.2		33	460.8		65	372.8	
3 0	65.2		5 34	460.8		66	377.3	
4 3	129.4		35	463.5		67	381.1	
4	417.4		36	462.7		68	384.9	
5	438.2		37	462.7		69	388.7	
6	445.3		6 38	462.7		70	391.7	
7	448.7		7 39	149.1		71	395.1	
8	451.4		40	167.2		72	398.5	
9	452.9		41	181.2		73	401.5	
10	454.0		42	193.3		74	404.2	
11	454.8		43	205.4		75	407.2	
12	455.9		44	219.0		76	409.8	
13	456.7		45	228.8		77	412.5	
14	457.1		46	239.8		78	414.7	
15	457.4		47	250.3		79	417.4	
16	457.8		48	258.7		80	419.3	
17	457.8		49	268.9		81	421.2	
18	458.2		50	278.3		82	423.4	
19	458.6		51	285.9		83	424.9	
20	458.9		52	294.6		84	427.2	
21	458.9		53	302.5		85	428.7	
22	458.9		54	309.7		86	430.6	
23	459.3		55	316.5		87	432.1	
24	459.3		56	323.7		88	433.6	
25	459.3		57	329.7		89	434.8	
26	459.3		58	336.1		90	436.3	
27	460.1		59	342.2	II B-1058	91	437.8	
28	460.1		60	347.5		92	438.9	
29	460.1		61	352.8		93	440.1	
30	460.5		62	358.8		94	441.2	
31	460.5		63	363.7		95	441.9	

PRESSURE DATA

Instrument No.		AK-1-5009		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09079 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
96	442.7		205	404.2		275	436.3	
97	443.8		210	404.2		276	437.0	
98	445.0		215	403.4		277	438.2	
99	445.7		220	403.0		278	439.3	
100	446.1		225	402.6		279	440.8	
101	447.2		230	402.6		280	441.9	
102	447.6		235	402.6		281	443.5	
103	448.4		240	402.6		282	444.2	
104	449.1		245	402.6		283	445.3	
105	449.9		250	402.6		284	446.5	
110	452.1		11 252	402.6		285	447.6	
115	454.4		12 254	367.5		286	448.0	
120	455.5		255	374.7		287	449.1	
125	457.1		256	383.0		288	449.9	
130	458.2		257	387.5		289	450.6	
135	458.9		258	392.4		290	451.4	
140	460.1		259	397.7		291	452.1	
145	460.8		260	400.8		292	452.5	
150	461.2		261	404.5		293	453.3	
155	461.6		262	408.3		294	454.0	
160	461.6		263	411.0		295	454.4	
165	463.5		264	414.4		300	456.3	
170	464.2		265	418.1		305	457.8	
175	465.4		266	420.0		310	459.3	
180	465.4		267	422.7		315	460.1	
185	465.4		268	424.9		320	461.2	
190	465.4		269	426.8		325	461.6	
8 193	465.4		270	429.1	II B-1059	330	462.0	
9 194	515.6		271	430.6		335	462.7	
195	457.1		272	431.7		340	462.7	
10 197	408.7		273	433.6		345	462.7	
200	405.3		274	434.8		350	462.7	

PRESSURE DATA

Instrument No.	AK-1-5009		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09079 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

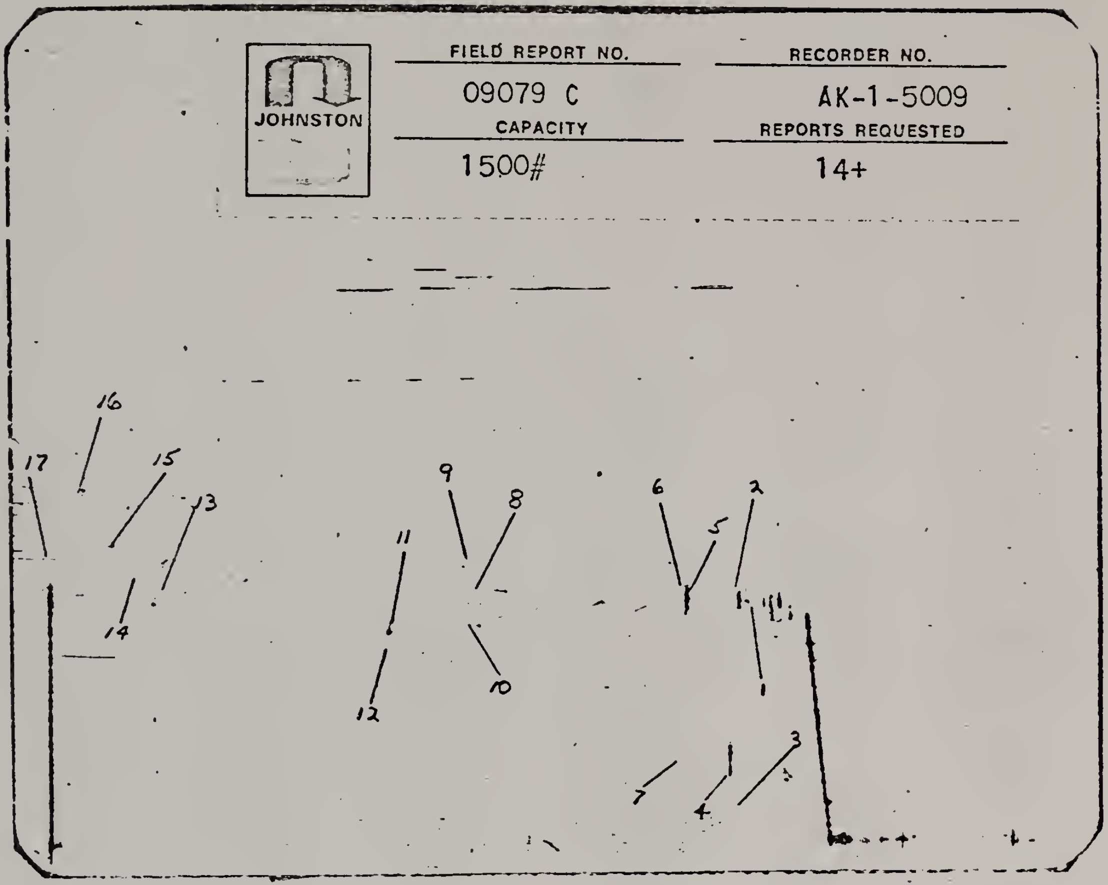
Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

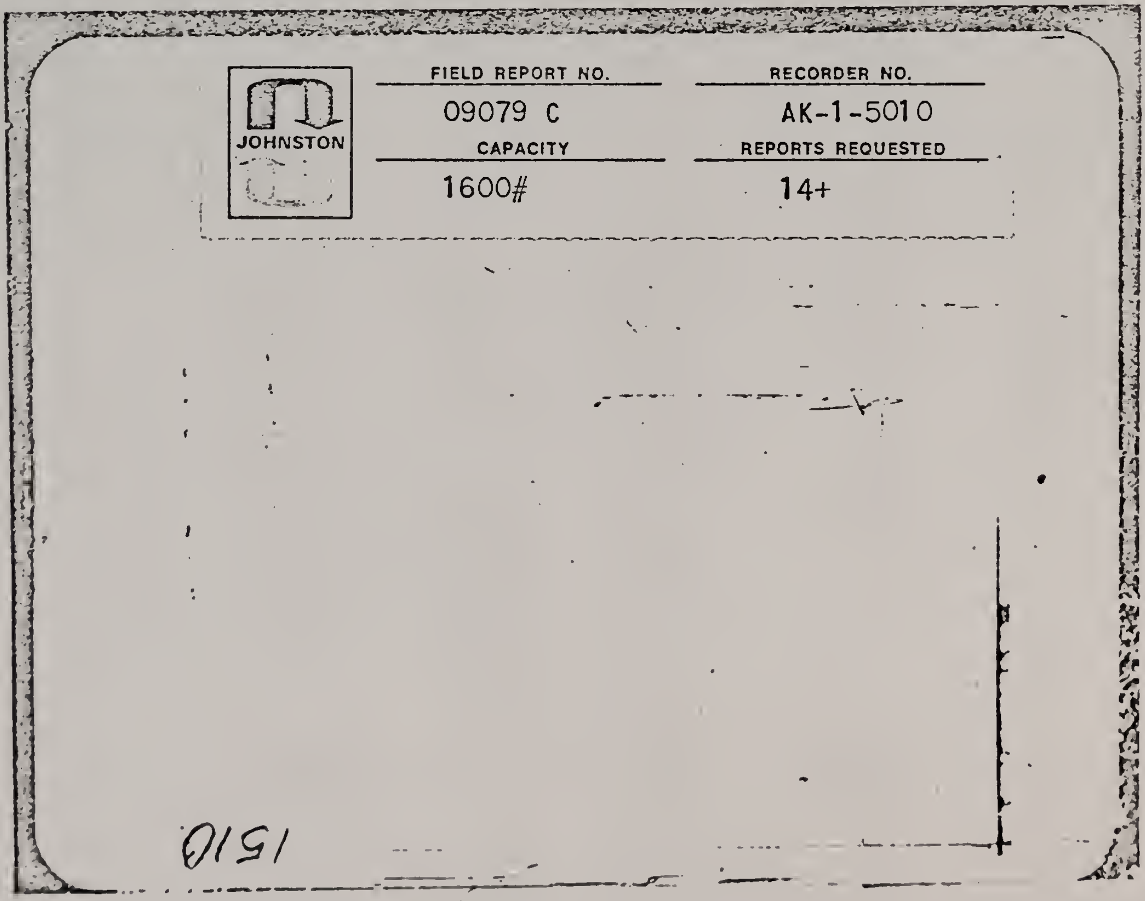
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
355	463.1		454	545.9				
360	463.9		456	549.6				
365	464.2		15 457	551.9				
370	464.2		458	557.6				
375	464.2		460	578.0				
380	464.2		462	596.9				
385	464.6		464	613.1				
390	464.6		466	619.6				
395	464.6		468	634.3				
400	464.6		470	640.7				
405	464.6		472	642.2				
410	465.0		474	643.4				
415	465.0		476	644.1				
13 416	465.0		16 478	645.3				
418	465.8		480	632.4				
420	469.2		482	617.7				
422	474.8		484	604.8				
424	479.7		486	593.1				
426	483.9		488	581.4				
428	487.7		490	570.8				
430	491.1		492	561.4				
432	493.7		494	553.4				
434	496.4		496	545.5				
436	498.6		498	539.1				
438	500.5		17 499	535.3				
440	507.7							
442	515.3							
444	521.7							
446	528.1							
448	533.0							
450	537.6							
452	542.1							

II B-1060



FIELD REPORT NO.	RECORDER NO.
09079 C	AK-1-5009
CAPACITY	REPORTS REQUESTED
1500#	14+



FIELD REPORT NO.	RECORDER NO.
09079 C	AK-1-5010
CAPACITY	REPORTS REQUESTED
1600#	14+

DST
23
1512-1572

sperry-sun

POST OFFICE BOX 36363 HOUSTON, TEXAS 77036 (713) 494-3021

J. A. Fouché
President

January 7, 1975

Mr. Frederick R. Scheerer
Atlantic-Richfield Company
1500 Security Life Building
Denver, Colorado 80202

Dear Sir:

Enclosed is the original of our Precision Pressure Gauge Drill Stem Test Job SPG-11210-U, performed on your Federal SG-17 Well, Tract C-b, Piceance Creek Basin, Sorghum Gulch, Rio Blanco County, Colorado on December 12, 1974.

Also enclosed are the charts for gauge numbers 194 and 133 with Field Data Sheet.

Distribution is being made according to the attached mailing list.

Thank you for this opportunity to be of service.

Very truly yours,

Carl Kisinger, Jr.

Carl Kisinger, Jr.
Manager, Pressure Services

CK:jg
Enclosures

PRESSURE GAUGE DRILL STEM TEST SHEET

ob No. SPC 11210 U Date 12/12/74 Run ____ Office CASPER, WYO

Customer ARCO ET AL Location ____

State COLORADO County/~~Parish~~ RIO BLANCO

Well SORGHAM GULCH No. 17 Field C TRACT CB

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 05:00 AM	12/12/74	2.		
Depart: Well/~~Dock~~	1. 2200	12/12/74	2.		17 Hrs.
Gauge Start in Hole	1. 0650	12/12/74	2.		
Gauge Out of Hole	1. 2030	12/12/74	2.		13 hrs 20 min ~~Hrs.~~

No. Trips 1 Miles 45 Total Mileage 90

Top Gauge # 194 Element # 35338 Range 2000 lbs Time Mode 1 min

Btm. Gauge # 133 Element # 35335 Range 2000 lbs Time Mode 1 min

Type Tool DST Test Depth 1572' - 1512' Zero Point ROTARY TABLE

Packer Depth 1512' Tail Pipe Depth 1572' Top Gauge Depth 1480'

Bottom Hole Temp. 94° F Atmos. Temp. 22° F Bottom Gauge Depth 1541'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	0907	12/12/74	Initial Hydrostatic ~~Mud~~	440 lbs
Packer Set	0917	12/12/74	Initial Draw Down	
Initial Open	0931	12/12/74	Initial Build-Up	
Initial Shut-In	0933	12/12/74	Final Flow	
Start Flow	1009	12/12/74	Final Build-Up	
Final Shut-In	1815	12/12/74	Final Hydrostatic Mud	
Packer Unseated	1821	12/12/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge ____ ____ ____ Bottom Gauge ____ ____ ____

Remarks ____

SP-423

II B-1063

MIKE ELMORE
Operator

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER FEDERAL SG-17
FIELD/LEASE TRACT C-B SORGHUM GULCH
COUNTY/PARISH RIO BLANCO
STATE COLORADO
TYPE OF TEST DRILL STEM
REFERENCE ELEV GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 194 WITH 2000 LB. ELEMENT.

DEPTH OF GAUGE 1480 FT. OUTSIDE D.P.

INSIDE ANNULUS

TEST INTERVAL SURFACE TO 1512 FT.

SET PACKER DEPTH 1512 FT.

INITIAL HYDROSTATIC IS 433.24 PSI

FINAL HYDROSTATIC IS 437.51 PSI

GROUND LEVEL REFERENCE 7036 FT.

32 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                                  DATE OF
SPG-11210-U                                                           DECEMBER 12, 1

GAUGE/RUN NUMBER                                                            DATE OF
194 RUN NO. 21  DST NO. 23                                            DECEMBER 18, 1

                                     SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE                        TIME      DATE                 COMMENTS
   TIME      (PSI)                         HR MIN

   0.000     436.724                       09  33 DEC 12,1974   INITIAL SHUTIN
    .016     436.724                       09  34 DEC 12,1974
    .032     436.724                       09  35 DEC 12,1974
    .048     436.724                       09  36 DEC 12,1974
    .065     436.724                       09  37 DEC 12,1974
    .081     436.770                       09  38 DEC 12,1974
    .097     436.770                       09  39 DEC 12,1974
    .113     436.817                       09  40 DEC 12,1974
    .129     436.817                       09  41 DEC 12,1974
    .145     436.817                       09  42 DEC 12,1974
    .161     436.863                       09  43 DEC 12,1974
    .177     436.863                       09  44 DEC 12,1974
    .194     436.863                       09  45 DEC 12,1974
    .210     436.910                       09  46 DEC 12,1974
    .226     436.956                       09  47 DEC 12,1974
    .242     437.003                       09  48 DEC 12,1974
    .258     437.003                       09  48 DEC 12,1974
    .274     436.956                       09  49 DEC 12,1974
    .290     437.003                       09  50 DEC 12,1974
    .306     437.003                       09  51 DEC 12,1974
    .323     437.003                       09  52 DEC 12,1974
    .339     437.096                       09  53 DEC 12,1974
    .355     437.096                       09  54 DEC 12,1974
    .371     437.096                       09  55 DEC 12,1974
    .387     437.142                       09  56 DEC 12,1974
    .403     437.142                       09  57 DEC 12,1974
    .419     437.189                       09  58 DEC 12,1974
    .435     437.189                       09  59 DEC 12,1974
    .452     437.189                       10  00 DEC 12,1974
    .468     437.282                       10  01 DEC 12,1974
    .484     437.189                       10  02 DEC 12,1974
    .500     437.328                       10  03 DEC 12,1974   END SHUTIN
```

```
                         32 POINTS REPORTED THIS RUN

                                   PAGE  2
```

JOB NUMBER
SPG-11210-U

DATE OF
DECEMBER 12,

GAUGE/RUN NUMBER
194 RUN NO, 21 DST NO, 23

DATE OF
DECEMBER 18,

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0,000	437,307	10	09	DEC 12,1974	START FLOW
,017	437,400	10	10	DEC 12,1974	
,034	437,493	10	11	DEC 12,1974	
,051	437,493	10	12	DEC 12,1974	
,067	437,539	10	13	DEC 12,1974	
,084	437,586	10	14	DEC 12,1974	
,101	437,586	10	15	DEC 12,1974	
,118	437,632	10	16	DEC 12,1974	
,135	437,632	10	17	DEC 12,1974	
,152	437,679	10	18	DEC 12,1974	
,169	437,725	10	19	DEC 12,1974	
,186	437,725	10	20	DEC 12,1974	
,202	437,725	10	21	DEC 12,1974	
,219	437,772	10	22	DEC 12,1974	
,236	437,772	10	23	DEC 12,1974	
,253	437,911	10	24	DEC 12,1974	
,270	437,865	10	25	DEC 12,1974	
,287	437,911	10	26	DEC 12,1974	
,304	437,911	10	27	DEC 12,1974	
,321	438,004	10	28	DEC 12,1974	
,337	437,911	10	29	DEC 12,1974	
,354	438,051	10	30	DEC 12,1974	
,371	437,958	10	31	DEC 12,1974	
,388	438,004	10	32	DEC 12,1974	
,405	438,004	10	33	DEC 12,1974	
,422	438,004	10	34	DEC 12,1974	
,439	438,051	10	35	DEC 12,1974	
,456	438,097	10	36	DEC 12,1974	
,472	438,097	10	37	DEC 12,1974	
,489	438,097	10	38	DEC 12,1974	
,506	438,283	10	39	DEC 12,1974	
,523	438,283	10	40	DEC 12,1974	
,540	438,283	10	41	DEC 12,1974	
,557	438,283	10	42	DEC 12,1974	
,574	438,283	10	43	DEC 12,1974	
,591	438,237	10	44	DEC 12,1974	
,607	438,237	10	45	DEC 12,1974	
,624	438,330	10	46	DEC 12,1974	
,641	438,283	10	47	DEC 12,1974	
,658	438,376	10	48	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF
DECEMBER 12, 19

GAUGE/RUN NUMBER
194 RUN NO, 21 DST NO, 23

DATE OF
DECEMBER 18, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
,675	438,376	10	50	DEC 12,1974	
,692	438,423	10	51	DEC 12,1974	
,709	438,330	10	52	DEC 12,1974	
,726	438,469	10	53	DEC 12,1974	
,742	438,469	10	54	DEC 12,1974	
,759	438,562	10	55	DEC 12,1974	
,776	438,609	10	56	DEC 12,1974	
,793	438,609	10	57	DEC 12,1974	
,810	438,609	10	58	DEC 12,1974	
,827	438,609	10	59	DEC 12,1974	
,844	438,655	11	00	DEC 12,1974	
,861	438,702	11	01	DEC 12,1974	
,877	438,748	11	02	DEC 12,1974	
,894	438,702	11	03	DEC 12,1974	
,911	438,748	11	04	DEC 12,1974	
,928	438,795	11	05	DEC 12,1974	
,945	438,748	11	06	DEC 12,1974	
,962	438,795	11	07	DEC 12,1974	
,979	438,887	11	08	DEC 12,1974	
,996	438,841	11	09	DEC 12,1974	
1,012	438,887	11	10	DEC 12,1974	
1,029	438,934	11	11	DEC 12,1974	
1,046	438,934	11	12	DEC 12,1974	
1,063	438,934	11	13	DEC 12,1974	
1,080	438,934	11	14	DEC 12,1974	
1,097	438,934	11	15	DEC 12,1974	
1,114	438,934	11	16	DEC 12,1974	
1,131	439,027	11	17	DEC 12,1974	
1,147	439,027	11	18	DEC 12,1974	
1,164	438,980	11	19	DEC 12,1974	
1,181	439,120	11	20	DEC 12,1974	
1,198	439,073	11	21	DEC 12,1974	
1,215	439,027	11	22	DEC 12,1974	
1,232	439,027	11	23	DEC 12,1974	
1,249	438,980	11	24	DEC 12,1974	
1,266	439,073	11	25	DEC 12,1974	
1,282	439,120	11	26	DEC 12,1974	
1,299	439,259	11	27	DEC 12,1974	
1,316	439,213	11	28	DEC 12,1974	
1,333	439,259	11	29	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF
DECEMBER 12,

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF
DECEMBER 18,

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.350	439.259	11	30	DEC 12,1974	
1.367	439,259	11	31	DEC 12,1974	
1.384	439,306	11	32	DEC 12,1974	
1,401	439.306	11	33	DEC 12,1974	
1,417	439,306	11	34	DEC 12,1974	
1,434	439.306	11	35	DEC 12,1974	
1.451	439,352	11	36	DEC 12,1974	
1.468	439.306	11	37	DEC 12,1974	
1.485	439,306	11	38	DEC 12,1974	
1.502	439.259	11	39	DEC 12,1974	
1,519	439,352	11	40	DEC 12,1974	
1,536	439,399	11	41	DEC 12,1974	
1,552	439,399	11	42	DEC 12,1974	
1,569	439,399	11	43	DEC 12,1974	
1,586	439,399	11	44	DEC 12,1974	
1.603	439,399	11	45	DEC 12,1974	
1,620	439,492	11	46	DEC 12,1974	
1,637	439,492	11	47	DEC 12,1974	
1,654	439,492	11	48	DEC 12,1974	
1,671	439,678	11	49	DEC 12,1974	
1,687	439,678	11	50	DEC 12,1974	
1,704	439,678	11	51	DEC 12,1974	
1,721	439,678	11	52	DEC 12,1974	
1.738	439,724	11	53	DEC 12,1974	
1,755	439,724	11	54	DEC 12,1974	
1,772	439,724	11	55	DEC 12,1974	
1,789	439,771	11	56	DEC 12,1974	
1,806	439,817	11	57	DEC 12,1974	
1,822	439,817	11	58	DEC 12,1974	
1,839	439,817	11	59	DEC 12,1974	
1,856	439,817	12	00	DEC 12,1974	
1,873	439,817	12	01	DEC 12,1974	
1,890	439,864	12	02	DEC 12,1974	
1,907	439.864	12	03	DEC 12,1974	
1,924	439,864	12	04	DEC 12,1974	
1,941	439,910	12	05	DEC 12,1974	
1,957	439,957	12	06	DEC 12,1974	
1,974	439,957	12	07	DEC 12,1974	
1,991	439,957	12	08	DEC 12,1974	
2,008	439,957	12	09	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JOB
DECEMBER 12, 1974

GAUGE/RUN NUMBER
194 RUN NO, 21 DST NO, 23

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2,025	439,957	12	11	DEC 12,1974	
2,042	439,957	12	12	DEC 12,1974	
2,059	439,957	12	13	DEC 12,1974	
2,076	440,050	12	14	DEC 12,1974	
2,092	440,003	12	15	DEC 12,1974	
2,109	440,050	12	16	DEC 12,1974	
2,126	440,050	12	17	DEC 12,1974	
2,143	440,096	12	18	DEC 12,1974	
2,160	440,096	12	19	DEC 12,1974	
2,177	440,143	12	20	DEC 12,1974	
2,194	440,189	12	21	DEC 12,1974	
2,211	440,236	12	22	DEC 12,1974	
2,227	440,236	12	23	DEC 12,1974	
2,244	440,236	12	24	DEC 12,1974	
2,261	440,282	12	25	DEC 12,1974	
2,278	440,282	12	26	DEC 12,1974	
2,295	440,329	12	27	DEC 12,1974	
2,312	440,329	12	28	DEC 12,1974	
2,329	440,329	12	29	DEC 12,1974	
2,346	440,375	12	30	DEC 12,1974	
2,362	440,375	12	31	DEC 12,1974	
2,379	440,375	12	32	DEC 12,1974	
2,396	440,375	12	33	DEC 12,1974	
2,413	440,422	12	34	DEC 12,1974	
2,430	440,422	12	35	DEC 12,1974	
2,447	440,422	12	36	DEC 12,1974	
2,464	440,468	12	37	DEC 12,1974	
2,481	440,422	12	38	DEC 12,1974	
2,497	440,422	12	39	DEC 12,1974	
2,514	440,468	12	40	DEC 12,1974	
2,531	440,468	12	41	DEC 12,1974	
2,548	440,468	12	42	DEC 12,1974	
2,565	440,515	12	43	DEC 12,1974	
2,582	440,468	12	44	DEC 12,1974	
2,599	440,561	12	45	DEC 12,1974	JETTING
2,616	440,561	12	46	DEC 12,1974	
2,632	440,561	12	47	DEC 12,1974	
2,649	440,561	12	48	DEC 12,1974	
2,666	440,654	12	49	DEC 12,1974	
2,683	440,608	12	50	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
194 RUN NO, 21 DST NO, 23

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.700	440.654	12	51	DEC 12,1974	
2.717	440.654	12	52	DEC 12,1974	
2.734	440.654	12	53	DEC 12,1974	
2.751	440.654	12	54	DEC 12,1974	
2.767	440.701	12	55	DEC 12,1974	
2.784	440.701	12	56	DEC 12,1974	
2.801	440.701	12	57	DEC 12,1974	
2.818	440.747	12	58	DEC 12,1974	
2.835	440.747	12	59	DEC 12,1974	
2.852	440.794	13	00	DEC 12,1974	
2.869	440.840	13	01	DEC 12,1974	
2.886	440.794	13	02	DEC 12,1974	
2.902	440.840	13	03	DEC 12,1974	
2.919	440.840	13	04	DEC 12,1974	
2.936	440.840	13	05	DEC 12,1974	
2.953	440.840	13	06	DEC 12,1974	
2.970	440.840	13	07	DEC 12,1974	
2.987	440.887	13	08	DEC 12,1974	
3.004	440.887	13	09	DEC 12,1974	
3.021	440.887	13	10	DEC 12,1974	
3.037	440.887	13	11	DEC 12,1974	
3.054	440.887	13	12	DEC 12,1974	
3.071	440.887	13	13	DEC 12,1974	
3.088	440.933	13	14	DEC 12,1974	
3.105	440.933	13	15	DEC 12,1974	
3.122	440.933	13	16	DEC 12,1974	
3.139	440.980	13	17	DEC 12,1974	
3.156	440.980	13	18	DEC 12,1974	
3.172	440.980	13	19	DEC 12,1974	
3.189	440.980	13	20	DEC 12,1974	
3.206	441.026	13	21	DEC 12,1974	
3.223	441.026	13	22	DEC 12,1974	
3.240	441.026	13	23	DEC 12,1974	
3.257	441.026	13	24	DEC 12,1974	
3.274	441.026	13	25	DEC 12,1974	
3.291	441.073	13	26	DEC 12,1974	
3.307	441.073	13	27	DEC 12,1974	
3.324	441.166	13	28	DEC 12,1974	
3.341	441.119	13	29	DEC 12,1974	
3.358	441.073	13	30	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF J
DECEMBER 12, 197

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3,375	441,119	13	32	DEC 12,1974	
3,392	441,165	13	33	DEC 12,1974	
3,409	441,166	13	34	DEC 12,1974	
3,426	441,119	13	35	DEC 12,1974	
3,442	441,165	13	36	DEC 12,1974	
3,459	441.166	13	37	DEC 12,1974	
3,476	441,166	13	38	DEC 12,1974	
3,493	441,212	13	39	DEC 12,1974	
3.510	441,259	13	40	DEC 12,1974	
3,527	441,259	13	41	DEC 12,1974	
3,544	441,259	13	42	DEC 12,1974	
3,561	441,305	13	43	DEC 12,1974	
3,577	441,305	13	44	DEC 12,1974	
3,594	441,305	13	45	DEC 12,1974	END JETTING
3,611	441,352	13	46	DEC 12,1974	
3,628	441,305	13	47	DEC 12,1974	
3,645	441,352	13	48	DEC 12,1974	
3,662	441.398	13	49	DEC 12,1974	
3,679	441,398	13	50	DEC 12,1974	
3,696	441,398	13	51	DEC 12,1974	
3.712	441,445	13	52	DEC 12,1974	
3,729	441,491	13	53	DEC 12,1974	
3.746	441,491	13	54	DEC 12,1974	
3,763	441,445	13	55	DEC 12,1974	
3,780	441,491	13	56	DEC 12,1974	
3.797	441,538	13	57	DEC 12,1974	
3,814	441,538	13	58	DEC 12,1974	
3,831	441.631	13	59	DEC 12,1974	
3,847	441,584	14	00	DEC 12,1974	
3,864	441,631	14	01	DEC 12,1974	
3,881	441,584	14	02	DEC 12,1974	
3,898	441,631	14	03	DEC 12,1974	
3,915	441,584	14	04	DEC 12,1974	
3,932	441,631	14	05	DEC 12,1974	
3,949	441,538	14	06	DEC 12,1974	
3,966	441,631	14	07	DEC 12,1974	
3,982	441,631	14	08	DEC 12,1974	
3,999	441,631	14	09	DEC 12,1974	
4,016	441,631	14	10	DEC 12,1974	
4,033	441,631	14	11	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JOB
DECEMBER 12, 1974

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.050	441.677	14	12	DEC 12,1974	
4.067	441.677	14	13	DEC 12,1974	
4.084	441.724	14	14	DEC 12,1974	
4.101	441.677	14	15	DEC 12,1974	
4.117	441.770	14	16	DEC 12,1974	
4.134	441.724	14	17	DEC 12,1974	
4.151	441.724	14	18	DEC 12,1974	
4.168	441.770	14	19	DEC 12,1974	
4.185	441.770	14	20	DEC 12,1974	
4.202	441.817	14	21	DEC 12,1974	
4.219	441.817	14	22	DEC 12,1974	
4.236	441.817	14	23	DEC 12,1974	
4.252	441.863	14	24	DEC 12,1974	
4.269	441.817	14	25	DEC 12,1974	
4.286	441.817	14	26	DEC 12,1974	
4.303	441.863	14	27	DEC 12,1974	
4.320	441.910	14	28	DEC 12,1974	
4.337	441.910	14	29	DEC 12,1974	
4.354	441.910	14	30	DEC 12,1974	
4.371	441.910	14	31	DEC 12,1974	
4.387	441.956	14	32	DEC 12,1974	
4.404	441.956	14	33	DEC 12,1974	
4.421	441.956	14	34	DEC 12,1974	
4.438	441.956	14	35	DEC 12,1974	
4.455	441.956	14	36	DEC 12,1974	
4.472	442.003	14	37	DEC 12,1974	
4.489	442.003	14	38	DEC 12,1974	
4.506	442.003	14	39	DEC 12,1974	
4.522	442.049	14	40	DEC 12,1974	
4.539	442.049	14	41	DEC 12,1974	
4.556	442.049	14	42	DEC 12,1974	
4.573	442.049	14	43	DEC 12,1974	
4.590	442.049	14	44	DEC 12,1974	
4.607	442.096	14	45	DEC 12,1974	
4.624	442.096	14	46	DEC 12,1974	
4.641	442.096	14	47	DEC 12,1974	
4.657	442.142	14	48	DEC 12,1974	
4.674	442.142	14	49	DEC 12,1974	
4.691	442.142	14	50	DEC 12,1974	
4.708	442.189	14	51	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JOB
DECEMBER 12, 1974

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4,725	442,189	14	53	DEC 12,1974	
4,742	442,189	14	54	DEC 12,1974	
4,759	442,189	14	55	DEC 12,1974	
4,776	442,189	14	56	DEC 12,1974	
4,792	442,189	14	57	DEC 12,1974	
4,809	442,235	14	58	DEC 12,1974	
4,826	442,189	14	59	DEC 12,1974	
4,843	442,189	15	00	DEC 12,1974	
4,860	442,235	15	01	DEC 12,1974	
4,877	442,235	15	02	DEC 12,1974	
4,894	442,235	15	03	DEC 12,1974	
4,911	442,235	15	04	DEC 12,1974	
4,927	442,235	15	05	DEC 12,1974	
4,944	442,235	15	06	DEC 12,1974	
4,961	442,232	15	07	DEC 12,1974	
4,978	442,232	15	08	DEC 12,1974	
4,995	442,232	15	09	DEC 12,1974	21 G/M ANNULUS
5,012	442,328	15	10	DEC 12,1974	
5,029	442.421	15	11	DEC 12,1974	
5,046	443,444	15	12	DEC 12,1974	
5,062	444,141	15	13	DEC 12,1974	
5,079	444,188	15	14	DEC 12,1974	
5,096	445,025	15	15	DEC 12,1974	
5,113	445,350	15	16	DEC 12,1974	
5,130	445,722	15	17	DEC 12,1974	
5,147	445,861	15	18	DEC 12,1974	
5,164	446,094	15	19	DEC 12,1974	
5,181	446,280	15	20	DEC 12,1974	
5,197	446,419	15	21	DEC 12,1974	
5,214	446,512	15	22	DEC 12,1974	
5,231	446,652	15	23	DEC 12,1974	
5.248	446,745	15	24	DEC 12,1974	
5,265	446,838	15	25	DEC 12,1974	
5,282	446,884	15	26	DEC 12,1974	
5,299	446,931	15	27	DEC 12,1974	
5,316	446,884	15	28	DEC 12,1974	
5,332	446,931	15	29	DEC 12,1974	39 G/M ANNULUS
5,349	447,070	15	30	DEC 12,1974	
5,366	447,954	15	31	DEC 12,1974	
5,383	448,605	15	32	DEC 12,1974	

```
JOB NUMBER                                                   DATE OF J
SPG-11210-U                                              DECEMBER 12, 197

GAUGE/RUN NUMBER                                             DATE OF R
194  RUN NO. 21  DST NO. 23                              DECEMBER 18, 197

                                SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA    PRESSURE                   TIME      DATE              COMMENTS
      TIME      (PSI)                    HR MIN

      5,400     449,116                  15   33 DEC 12,1974
      5,417     449,534                  15   34 DEC 12,1974
      5,434     449,860                  15   35 DEC 12,1974
      5,451     450,139                  15   36 DEC 12,1974
      5,467     450,371                  15   37 DEC 12,1974
      5,484     450,511                  15   38 DEC 12,1974
      5,501     450,743                  15   39 DEC 12,1974
      5,518     450,929                  15   40 DEC 12,1974
      5,535     451,115                  15   41 DEC 12,1974
      5,552     451,255                  15   42 DEC 12,1974
      5,569     451,348                  15   43 DEC 12,1974
      5,586     451,487                  15   44 DEC 12,1974
      5,602     451,720                  15   45 DEC 12,1974
      5,619     451,859                  15   46 DEC 12,1974
      5,636     451,952                  15   47 DEC 12,1974
      5,653     451,999                  15   48 DEC 12,1974
      5,670     452,045                  15   49 DEC 12,1974   61 G/M ANNULUS
      5,687     452,650                  15   50 DEC 12,1974
      5,704     453,672                  15   51 DEC 12,1974
      5,721     454,649                  15   52 DEC 12,1974
      5,737     455,486                  15   53 DEC 12,1974
      5,754     456,183                  15   54 DEC 12,1974
      5.771     456,787                  15   55 DEC 12,1974
      5,788     457,299                  15   56 DEC 12,1974
      5,805     457,764                  15   57 DEC 12,1974
      5,822     458,043                  15   58 DEC 12,1974
      5,839     458,415                  15   59 DEC 12,1974
      5.856     458,601                  16   00 DEC 12,1974
      5,872     458,973                  16   01 DEC 12,1974
      5,889     459,205                  16   02 DEC 12,1974
      5,906     459,438                  16   03 DEC 12,1974
      5,923     459,624                  16   04 DEC 12,1974
      5,940     459,809                  16   05 DEC 12,1974
      5,957     459,902                  16   06 DEC 12,1974
      5,974     460,135                  16   07 DEC 12,1974
      5,991     460,274                  16   08 DEC 12,1974
      6,007     460,367                  16   09 DEC 12,1974   DECLINE
      6,024     459,715                  16   10 DEC 12,1974
      6,041     456,380                  16   11 DEC 12,1974
      6,058     454,370                  16   12 DEC 12,1974
```

```
JOB NUMBER                                                      DATE OF JOB
SPG-11210-U                                                DECEMBER 12, 1974

GAUGE/RUN NUMBER                                                DATE OF RUN
194  RUN NO, 21  DST NO. 23                                DECEMBER 18, 1974

                                SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                  TIME      DATE            COMMENTS
     TIME      (PSI)                    HR MIN

     6.075    452.510                   16  14 DEC 12,1974
     6.092    450.975                   16  15 DEC 12,1974
     6.109    449.767                   16  16 DEC 12,1974
     6.126    448.337                   16  17 DEC 12,1974
     6.142    448.093                   16  18 DEC 12,1974
     6.159    447.489                   16  19 DEC 12,1974
     6.176    446.977                   16  20 DEC 12,1974
     6.193    446.512                   16  21 DEC 12,1974
     6.210    446.120                   16  22 DEC 12,1974
     6.227    445.861                   16  23 DEC 12,1974
     6.244    445.583                   16  24 DEC 12,1974
     6.261    445.397                   16  25 DEC 12,1974
     6.277    445.164                   16  26 DEC 12,1974
     6.294    445.071                   16  27 DEC 12,1974
     6.311    444.932                   16  28 DEC 12,1974
     6.328    444.792                   16  29 DEC 12,1974
     6.345    444.745                   16  30 DEC 12,1974
     6.362    444.653                   16  31 DEC 12,1974
     6.379    444.606                   16  32 DEC 12,1974
     6.396    444.513                   16  33 DEC 12,1974
     6.412    444.467                   16  34 DEC 12,1974  2 G/M INSIDE
     6.429    444.420                   16  35 DEC 12,1974  DRILL PIPE
     6.446    444.327                   16  36 DEC 12,1974
     6.463    444.327                   16  37 DEC 12,1974
     6.480    444.281                   16  38 DEC 12,1974
     6.497    444.188                   16  39 DEC 12,1974
     6.514    444.188                   16  40 DEC 12,1974
     6.531    444.188                   16  41 DEC 12,1974
     6.547    444.141                   16  42 DEC 12,1974
     6.564    444.095                   16  43 DEC 12,1974
     6.581    444.095                   16  44 DEC 12,1974
     6.598    444.095                   16  45 DEC 12,1974
     6.615    444.095                   16  46 DEC 12,1974
     6.632    444.095                   16  47 DEC 12,1974
     6.649    444.048                   16  48 DEC 12,1974
     6.666    444.095                   16  49 DEC 12,1974
     6.682    444.095                   16  50 DEC 12,1974
     6.699    444.095                   16  51 DEC 12,1974
     6.716    444.095                   16  52 DEC 12,1974
     6.733    444.002                   16  53 DEC 12,1974
```

JOB NUMBER
SPG-11210-U

DATE OF JOB
DECEMBER 12, 1974

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF RUN
DECEMBER 16, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
6,750	444,002	16 54	DEC 12,1974	5 G/M INSIDE
6,767	444,002	16 55	DEC 12,1974	DRILL PIPE
6,784	444,048	16 56	DEC 12,1974	
6,801	444,048	16 57	DEC 12,1974	
6,817	444,002	16 58	DEC 12,1974	
6,834	444.002	16 59	DEC 12,1974	
6,851	444,002	17 00	DEC 12,1974	
6,868	444,002	17 01	DEC 12,1974	
6,885	444,002	17 02	DEC 12,1974	
6.902	444.002	17 03	DEC 12,1974	
6.919	444,002	17 04	DEC 12,1974	
6,936	444,002	17 05	DEC 12,1974	
6.952	444,002	17 06	DEC 12,1974	
6,969	444.002	17 07	DEC 12,1974	
6,986	444,002	17 08	DEC 12,1974	
7,003	444.002	17 09	DEC 12,1974	
7.020	444,002	17 10	DEC 12,1974	
7.037	444,002	17 11	DEC 12,1974	
7.054	444,048	17 12	DEC 12,1974	
7,071	444,002	17 13	DEC 12,1974	
7,087	444,048	17 14	DEC 12,1974	11 G/M INSIDE
7,104	444,048	17 15	DEC 12,1974	DRILL PIPE
7.121	444,002	17 16	DEC 12,1974	
7,138	444,048	17 17	DEC 12,1974	
7,155	444,048	17 18	DEC 12,1974	
7,172	444,048	17 19	DEC 12,1974	
7.189	444,048	17 20	DEC 12,1974	
7,206	444,048	17 21	DEC 12,1974	
7,222	444,002	17 22	DEC 12,1974	
7,239	444,002	17 23	DEC 12,1974	
7,256	444,002	17 24	DEC 12,1974	
7,273	444,048	17 25	DEC 12,1974	
7,290	444,048	17 26	DEC 12,1974	
7,307	444.095	17 27	DEC 12,1974	OVERFLOW
7,324	444.095	17 28	DEC 12,1974	
7,341	444,095	17 29	DEC 12,1974	
7,357	444,095	17 30	DEC 12,1974	
7,374	444.048	17 31	DEC 12,1974	
7.391	444,095	17 32	DEC 12,1974	
7,408	444,095	17 33	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JC
DECEMBER 12, 197

GAUGE/RUN NUMBER
194 RUN NO. 21 DST NO. 23

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.425	444.095	17	35	DEC 12,1974	DECLINE
7.442	444.095	17	36	DEC 12,1974	
7.459	444.095	17	37	DEC 12,1974	
7.476	444.141	17	38	DEC 12,1974	
7.492	444.141	17	39	DEC 12,1974	
7.509	444.141	17	40	DEC 12,1974	
7.526	444.141	17	41	DEC 12,1974	
7.543	444.141	17	42	DEC 12,1974	
7.560	444.141	17	43	DEC 12,1974	
7.577	444.141	17	44	DEC 12,1974	
7.594	444.141	17	45	DEC 12,1974	
7.611	444.141	17	46	DEC 12,1974	
7.627	444.141	17	47	DEC 12,1974	
7.644	444.141	17	48	DEC 12,1974	
7.661	444.141	17	49	DEC 12,1974	
7.678	444.141	17	50	DEC 12,1974	
7.695	444.141	17	51	DEC 12,1974	
7.712	444.138	17	52	DEC 12,1974	
7.729	444.095	17	53	DEC 12,1974	
7.746	444.141	17	54	DEC 12,1974	
7.762	444.141	17	55	DEC 12,1974	
7.779	444.141	17	56	DEC 12,1974	
7.796	444.141	17	57	DEC 12,1974	
7.813	444.138	17	58	DEC 12,1974	
7.830	444.141	17	59	DEC 12,1974	
7.847	444.141	18	00	DEC 12,1974	
7.864	444.188	18	01	DEC 12,1974	
7.881	444.188	18	02	DEC 12,1974	
7.897	444.141	18	03	DEC 12,1974	
7.914	444.141	18	04	DEC 12,1974	
7.931	444.188	18	05	DEC 12,1974	
7.948	444.188	18	06	DEC 12,1974	
7.965	444.188	18	07	DEC 12,1974	
7.982	444.234	18	08	DEC 12,1974	
7.999	444.234	18	09	DEC 12,1974	
8.016	444.234	18	10	DEC 12,1974	
8.032	444.234	18	11	DEC 12,1974	
8.049	444.234	18	12	DEC 12,1974	
8.066	444.231	18	13	DEC 12,1974	
8.083	444.281	18	14	DEC 12,1974	

```
JOB NUMBER                                                              DATE OF JC
SPG-11210-U                                                       DECEMBER 12, 197

GAUGE/RUN NUMBER                                                        DATE OF RU
194  RUN NC, 21  DST NO, 23                                       DECEMBER 13, 197

                                  SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE                          TIME      DATE              COMMENTS
   TIME      (PSI)                           HR MIN

   3.100     444,234                         18  15 DEC 12,1974   END OPEN
```

```
481 POINTS REPORTED THIS RUN
```

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 133 WITH 2000 LB. ELEMENT

DEPTH OF GAUGE IS 1541 FT, INSIDE D.P.

BELOW PACKER

TEST INTERVAL 1512 TO 1572 FT.

SET PACKER DEPTH 1512 FT.

INITIAL HYDROSTATIC IS 466.85 PSI.

FINAL HYDROSTATIC IS 476.98 PSI.

GROUND LEVEL REFERENCE 7036 FT.

488 POINTS REPORTED THIS JOB

JOB NUMBER
SPG-11210-U

DATE OF JOB
DECEMBER 12, 1974

GAUGE/RUN NUMBER
133 RUN NO. 21 DST NO. 23

DATE OF RUN
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
0.000	93.973	09	33	DEC 12,1974	INITIAL SHUTIN
.016	123.443	09	34	DEC 12,1974	
.031	447.932	09	35	DEC 12,1974	
.047	466.002	09	36	DEC 12,1974	
.063	472.350	09	37	DEC 12,1974	
.078	475.965	09	38	DEC 12,1974	
.094	477.772	09	39	DEC 12,1974	
.109	479.486	09	40	DEC 12,1974	
.125	480.645	09	41	DEC 12,1974	
.141	481.432	09	41	DEC 12,1974	
.156	482.127	09	42	DEC 12,1974	
.172	482.683	09	43	DEC 12,1974	
.188	483.239	09	44	DEC 12,1974	
.203	483.749	09	45	DEC 12,1974	
.219	484.166	09	46	DEC 12,1974	
.234	484.351	09	47	DEC 12,1974	
.250	484.537	09	48	DEC 12,1974	
.266	484.861	09	49	DEC 12,1974	
.281	485.046	09	50	DEC 12,1974	
.297	485.185	09	51	DEC 12,1974	
.313	485.417	09	52	DEC 12,1974	
.328	485.463	09	53	DEC 12,1974	
.344	485.788	09	54	DEC 12,1974	
.359	485.880	09	55	DEC 12,1974	
.375	486.019	09	56	DEC 12,1974	
.391	486.112	09	56	DEC 12,1974	
.406	486.205	09	57	DEC 12,1974	
.422	486.436	09	58	DEC 12,1974	
.438	485.436	09	59	DEC 12,1974	
.453	486.622	10	00	DEC 12,1974	
.469	486.714	10	01	DEC 12,1974	
.484	486.761	10	02	DEC 12,1974	
.500	486.761	10	03	DEC 12,1974	END SHUTIN

33 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                             DATE OF JOB
SPG-11210-U                                                      DECEMBER 12, 197

GAUGE/RUN NUMBER                                                       DATE OF RUN
133  RUN NO, 21                                                  DECEMBER 13, 197

                                 SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                     TIME      DATE            COMMENTS
    TIME      (PSI)                      HR MIN

    0.000    175.200                     10  09 DEC 12,1974    START FLOW
     .017    184.337                     10  10 DEC 12,1974
     .033    199.572                     10  11 DEC 12,1974
     .050    212.773                     10  12 DEC 12,1974
     .067    225.335                     10  13 DEC 12,1974
     .083    237.753                     10  14 DEC 12,1974
     .100    248.734                     10  15 DEC 12,1974
     .116    259.531                     10  16 DEC 12,1974
     .133    267.176                     10  17 DEC 12,1974
     .150    269.363                     10  18 DEC 12,1974
     .166    279.501                     10  19 DEC 12,1974
     .183    288.954                     10  20 DEC 12,1974
     .200    298.221                     10  21 DEC 12,1974
     .216    307.071                     10  22 DEC 12,1974
     .233    315.504                     10  23 DEC 12,1974
     .249    323.752                     10  24 DEC 12,1974
     .266    331.629                     10  25 DEC 12,1974
     .283    339.043                     10  26 DEC 12,1974
     .299    346.039                     10  27 DEC 12,1974
     .316    352.387                     10  28 DEC 12,1974
     .333    358.782                     10  29 DEC 12,1974
     .349    364.759                     10  30 DEC 12,1974
     .366    370.453                     10  31 DEC 12,1974
     .383    375.277                     10  32 DEC 12,1974
     .399    376.065                     10  33 DEC 12,1974
     .416    381.301                     10  34 DEC 12,1974
     .432    386.398                     10  35 DEC 12,1974
     .449    391.495                     10  36 DEC 12,1974
     .466    396.221                     10  37 DEC 12,1974
     .482    400.715                     10  38 DEC 12,1974
     .499    404.978                     10  39 DEC 12,1974
     .515    409.056                     10  40 DEC 12,1974
     .532    412.670                     10  41 DEC 12,1974
     .549    416.377                     10  42 DEC 12,1974
     .566    419.806                     10  43 DEC 12,1974
     .582    423.003                     10  44 DEC 12,1974
     .599    426.107                     10  45 DEC 12,1974
     .615    429.073                     10  46 DEC 12,1974
     .632    431.992                     10  47 DEC 12,1974
     .649    434.726                     10  48 DEC 12,1974
```

JOB NUMBER
SPG-11210-U

DATE OF J
DECEMBER 12, 19

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF R
DECEMBER 18, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.665	437.460	10	49	DEC 12,1974	
.682	440.008	10	50	DEC 12,1974	
.699	442.279	10	51	DEC 12,1974	
.715	444.410	10	52	DEC 12,1974	
.732	446.534	10	53	DEC 12,1974	
.748	448.573	10	54	DEC 12,1974	
.765	450.619	10	55	DEC 12,1974	
.782	452.380	10	56	DEC 12,1974	
.798	454.141	10	57	DEC 12,1974	
.815	455.716	10	58	DEC 12,1974	
.832	457.338	10	59	DEC 12,1974	
.848	458.774	11	00	DEC 12,1974	
.865	460.257	11	01	DEC 12,1974	
.882	461.501	11	02	DEC 12,1974	
.898	462.898	11	03	DEC 12,1974	
.915	464.149	11	04	DEC 12,1974	
.931	465.153	11	05	DEC 12,1974	
.948	466.466	11	06	DEC 12,1974	
.965	467.435	11	07	DEC 12,1974	
.981	468.412	11	08	DEC 12,1974	
.998	469.385	11	09	DEC 12,1974	
1.015	470.312	11	10	DEC 12,1974	
1.031	471.099	11	11	DEC 12,1974	
1.048	472.026	11	12	DEC 12,1974	
1.064	472.582	11	13	DEC 12,1974	
1.081	473.416	11	14	DEC 12,1974	
1.098	474.019	11	15	DEC 12,1974	
1.114	474.714	11	16	DEC 12,1974	
1.131	475.177	11	17	DEC 12,1974	
1.148	475.779	11	18	DEC 12,1974	
1.164	476.335	11	19	DEC 12,1974	
1.181	476.845	11	20	DEC 12,1974	
1.198	477.216	11	21	DEC 12,1974	
1.214	477.679	11	22	DEC 12,1974	
1.231	478.096	11	23	DEC 12,1974	
1.247	478.552	11	24	DEC 12,1974	
1.264	479.069	11	25	DEC 12,1974	
1.281	479.436	11	26	DEC 12,1974	
1.297	479.718	11	27	DEC 12,1974	
1.314	480.088	11	28	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JC
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO, 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1,331	480.320	11	29	DEC 12,1974	
1,347	480.734	11	30	DEC 12,1974	
1,364	481.015	11	31	DEC 12,1974	
1,380	481.293	11	32	DEC 12,1974	
1,397	481,525	11	33	DEC 12,1974	
1,414	481,595	11	34	DEC 12,1974	
1,430	482,174	11	35	DEC 12,1974	
1,447	482.313	11	36	DEC 12,1974	
1,464	482,591	11	37	DEC 12,1974	
1,480	482.822	11	38	DEC 12,1974	
1,497	483.054	11	39	DEC 12,1974	
1,514	483,239	11	40	DEC 12,1974	
1,530	483.425	11	41	DEC 12,1974	
1,547	483,564	11	42	DEC 12,1974	
1,563	483.703	11	43	DEC 12,1974	
1,580	483.934	11	44	DEC 12,1974	
1,597	484.073	11	45	DEC 12,1974	
1,613	484,305	11	46	DEC 12,1974	
1,630	484,444	11	47	DEC 12,1974	
1,647	484,583	11	43	DEC 12,1974	
1,663	484,768	11	49	DEC 12,1974	
1,680	484,861	11	50	DEC 12,1974	
1,697	485,000	11	51	DEC 12,1974	
1,713	485,093	11	52	DEC 12,1974	
1,730	485,185	11	53	DEC 12,1974	
1,746	485,324	11	54	DEC 12,1974	
1,763	485,510	11	55	DEC 12,1974	
1,780	485,602	11	56	DEC 12,1974	
1,796	485,741	11	57	DEC 12,1974	
1,813	485,880	11	58	DEC 12,1974	
1.830	485,973	11	59	DEC 12,1974	
1.846	486.019	12	00	DEC 12,1974	
1,863	486,066	12	01	DEC 12,1974	
1,879	486,158	12	02	DEC 12,1974	
1,896	486,297	12	03	DEC 12,1974	
1.913	486,436	12	04	DEC 12,1974	
1,929	486,436	12	05	DEC 12,1974	
1,946	486,529	12	06	DEC 12,1974	
1,963	486,714	12	07	DEC 12,1974	
1,979	486,622	12	08	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF J
DECEMBER 12, 19

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF R
DECEMBER 18, 19

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
1.995	486.354	12 09	DEC 12,1974	
2.013	486.354	12 10	DEC 12,1974	
2.029	486.946	12 11	DEC 12,1974	
2.046	486.946	12 12	DEC 12,1974	
2.062	487.035	12 13	DEC 12,1974	
2.079	487.039	12 14	DEC 12,1974	
2.096	487.173	12 15	DEC 12,1974	
2.112	487.173	12 16	DEC 12,1974	
2.129	487.919	12 17	DEC 12,1974	
2.146	487.734	12 18	DEC 12,1974	
2.162	488.244	12 19	DEC 12,1974	
2.179	488.800	12 20	DEC 12,1974	
2.195	488.614	12 21	DEC 12,1974	
2.212	488.985	12 22	DEC 12,1974	
2.229	489.309	12 23	DEC 12,1974	
2.245	489.634	12 24	DEC 12,1974	
2.262	489.912	12 25	DEC 12,1974	
2.279	489.773	12 26	DEC 12,1974	
2.295	490.097	12 27	DEC 12,1974	
2.312	490.375	12 28	DEC 12,1974	
2.329	490.607	12 29	DEC 12,1974	
2.345	490.282	12 30	DEC 12,1974	
2.362	490.560	12 31	DEC 12,1974	
2.378	490.375	12 32	DEC 12,1974	
2.395	490.282	12 33	DEC 12,1974	
2.412	490.097	12 34	DEC 12,1974	
2.428	490.329	12 35	DEC 12,1974	
2.445	490.236	12 36	DEC 12,1974	
2.462	490.143	12 37	DEC 12,1974	
2.478	489.912	12 38	DEC 12,1974	
2.495	489.819	12 39	DEC 12,1974	
2.511	489.773	12 40	DEC 12,1974	
2.528	489.773	12 41	DEC 12,1974	
2.545	489.634	12 42	DEC 12,1974	
2.561	489.541	12 43	DEC 12,1974	
2.578	489.495	12 44	DEC 12,1974	
2.595	489.495	12 45	DEC 12,1974	JETTING
2.611	489.448	12 46	DEC 12,1974	
2.628	489.402	12 47	DEC 12,1974	
2.645	538.379	12 48	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JC
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO, 21

DATE OF RU
DECEMBER 13, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.661	542.595	12	49	DEC 12,1974	
2.678	491.255	12	50	DEC 12,1974	
2.694	459.145	12	51	DEC 12,1974	
2.711	433.340	12	52	DEC 12,1974	
2.728	432.919	12	53	DEC 12,1974	
2.744	431.666	12	54	DEC 12,1974	
2.761	430.231	12	55	DEC 12,1974	
2.778	429.814	12	56	DEC 12,1974	
2.794	429.675	12	57	DEC 12,1974	
2.811	429.490	12	58	DEC 12,1974	
2.828	429.166	12	59	DEC 12,1974	
2.844	428.980	13	00	DEC 12,1974	
2.861	428.656	13	01	DEC 12,1974	
2.877	428.517	13	02	DEC 12,1974	
2.894	428.332	13	03	DEC 12,1974	
2.911	428.795	13	04	DEC 12,1974	
2.927	428.841	13	05	DEC 12,1974	
2.944	428.841	13	06	DEC 12,1974	
2.961	428.656	13	07	DEC 12,1974	
2.977	428.610	13	08	DEC 12,1974	
2.994	428.378	13	09	DEC 12,1974	
3.010	428.193	13	10	DEC 12,1974	
3.027	428.285	13	11	DEC 12,1974	
3.044	428.285	13	12	DEC 12,1974	
3.060	428.100	13	13	DEC 12,1974	
3.077	428.146	13	14	DEC 12,1974	
3.094	428.007	13	15	DEC 12,1974	
3.110	427.868	13	16	DEC 12,1974	
3.127	427.868	13	17	DEC 12,1974	
3.144	427.822	13	18	DEC 12,1974	
3.160	427.822	13	19	DEC 12,1974	
3.177	427.822	13	20	DEC 12,1974	
3.193	427.822	13	21	DEC 12,1974	
3.210	427.776	13	22	DEC 12,1974	
3.227	427.868	13	23	DEC 12,1974	
3.243	427.822	13	24	DEC 12,1974	
3.260	427.729	13	25	DEC 12,1974	
3.277	427.729	13	26	DEC 12,1974	
3.293	427.683	13	27	DEC 12,1974	
3.310	427.822	13	28	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.326	427.683	13	29	DEC 12,1974	
3.343	427.636	13	30	DEC 12,1974	
3.360	427.683	13	31	DEC 12,1974	
3.376	427.822	13	32	DEC 12,1974	
3.393	427.729	13	33	DEC 12,1974	
3.410	427.590	13	34	DEC 12,1974	
3.426	427.590	13	35	DEC 12,1974	
3.443	427.497	13	36	DEC 12,1974	
3.460	427.544	13	37	DEC 12,1974	
3.476	427.590	13	38	DEC 12,1974	
3.493	427.590	13	39	DEC 12,1974	
3.509	427.451	13	40	DEC 12,1974	
3.526	427.451	13	41	DEC 12,1974	
3.543	427.451	13	42	DEC 12,1974	
3.559	427.451	13	43	DEC 12,1974	
3.576	427.405	13	44	DEC 12,1974	
3.593	427.358	13	45	DEC 12,1974	END JETTING
3.609	427.358	13	46	DEC 12,1974	
3.626	427.034	13	47	DEC 12,1974	
3.643	393.441	13	48	DEC 12,1974	
3.659	396.684	13	49	DEC 12,1974	
3.676	405.488	13	50	DEC 12,1974	
3.692	411.929	13	51	DEC 12,1974	
3.709	416.933	13	52	DEC 12,1974	
3.726	421.428	13	53	DEC 12,1974	
3.742	425.459	13	54	DEC 12,1974	
3.759	429.444	13	55	DEC 12,1974	
3.776	433.011	13	56	DEC 12,1974	
3.792	436.579	13	57	DEC 12,1974	
3.809	439.915	13	58	DEC 12,1974	
3.825	442.631	13	59	DEC 12,1974	
3.842	445.198	14	00	DEC 12,1974	
3.859	447.885	14	01	DEC 12,1974	
3.875	450.387	14	02	DEC 12,1974	
3.892	452.750	14	03	DEC 12,1974	
3.909	454.326	14	04	DEC 12,1974	
3.925	456.504	14	05	DEC 12,1974	
3.942	457.940	14	06	DEC 12,1974	
3.959	459.330	14	07	DEC 12,1974	
3.975	460.581	14	08	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
3.992	461.971	14	09	DEC 12,1974	
4.008	463.130	14	10	DEC 12,1974	
4.025	464.334	14	11	DEC 12,1974	
4.042	465.215	14	12	DEC 12,1974	
4.058	466.373	14	12	DEC 12,1974	
4.075	467.810	14	13	DEC 12,1974	
4.092	468.963	14	14	DEC 12,1974	
4.108	470.126	14	15	DEC 12,1974	
4.125	471.331	14	16	DEC 12,1974	
4.141	472.258	14	17	DEC 12,1974	
4.158	473.138	14	18	DEC 12,1974	
4.175	474.111	14	19	DEC 12,1974	
4.191	474.899	14	20	DEC 12,1974	
4.208	475.540	14	21	DEC 12,1974	
4.225	476.243	14	22	DEC 12,1974	
4.241	476.938	14	23	DEC 12,1974	
4.258	477.585	14	24	DEC 12,1974	
4.275	478.189	14	25	DEC 12,1974	
4.291	478.745	14	26	DEC 12,1974	
4.308	479.208	14	27	DEC 12,1974	
4.324	479.718	14	28	DEC 12,1974	
4.341	480.228	14	29	DEC 12,1974	
4.358	480.737	14	30	DEC 12,1974	
4.374	481.201	14	31	DEC 12,1974	
4.391	481.571	14	32	DEC 12,1974	
4.408	481.896	14	33	DEC 12,1974	
4.424	482.220	14	34	DEC 12,1974	
4.441	482.544	14	35	DEC 12,1974	
4.457	482.951	14	36	DEC 12,1974	
4.474	483.289	14	37	DEC 12,1974	
4.491	483.703	14	38	DEC 12,1974	
4.507	483.842	14	39	DEC 12,1974	
4.524	484.166	14	40	DEC 12,1974	
4.541	484.305	14	41	DEC 12,1974	
4.557	484.629	14	42	DEC 12,1974	
4.574	484.768	14	43	DEC 12,1974	
4.591	485.046	14	44	DEC 12,1974	
4.607	485.139	14	45	DEC 12,1974	
4.624	485.371	14	46	DEC 12,1974	
4.640	485.649	14	47	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO, 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4,657	485,741	14	48	DEC 12,1974	
4,674	485,830	14	49	DEC 12,1974	
4,690	486,066	14	50	DEC 12,1974	
4.707	486,205	14	51	DEC 12,1974	
4,724	486,344	14	52	DEC 12,1974	
4,740	486,575	14	53	DEC 12,1974	
4,757	486,668	14	54	DEC 12,1974	
4,774	486,761	14	55	DEC 12,1974	
4,790	486,900	14	56	DEC 12,1974	
4,807	486,946	14	57	DEC 12,1974	
4,823	487,132	14	58	DEC 12,1974	
4,840	487.224	14	59	DEC 12,1974	
4,857	487.317	15	00	DEC 12,1974	
4,873	487,363	15	01	DEC 12,1974	
4,890	487,456	15	02	DEC 12,1974	
4,907	487,641	15	03	DEC 12,1974	
4,923	487,688	15	04	DEC 12,1974	
4,940	487,730	15	05	DEC 12,1974	
4,956	487,827	15	06	DEC 12,1974	
4,973	487,919	15	07	DEC 12,1974	
4,990	488,012	15	08	DEC 12,1974	
5,006	488,012	15	09	DEC 12,1974	21 G/M ANNULUS
5,023	488,197	15	10	DEC 12,1974	
5,040	488,197	15	11	DEC 12,1974	
5,056	488,244	15	12	DEC 12,1974	
5,073	488,336	15	13	DEC 12,1974	
5,090	488,383	15	14	DEC 12,1974	
5,106	488,475	15	15	DEC 12,1974	
5,123	488,568	15	16	DEC 12,1974	
5,139	488,661	15	17	DEC 12,1974	
5,156	488,614	15	18	DEC 12,1974	
5,173	488,614	15	19	DEC 12,1974	
5,189	488,800	15	20	DEC 12,1974	
5,206	488,753	15	21	DEC 12,1974	
5,223	488,846	15	22	DEC 12,1974	
5,239	488,892	15	23	DEC 12,1974	
5,256	488,935	15	24	DEC 12,1974	
5.272	489,031	15	25	DEC 12,1974	
5.289	489,073	15	26	DEC 12,1974	
5,306	489,031	15	27	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
5.322	489.170	15	28	DEC 12,1974	
5.339	489.124	15	29	DEC 12,1974	39 G/M ANNULUS
5.356	489.217	15	30	DEC 12,1974	
5.372	489.170	15	31	DEC 12,1974	
5.389	489.263	15	32	DEC 12,1974	
5.406	489.263	15	33	DEC 12,1974	
5.422	489.448	15	34	DEC 12,1974	
5.439	489.356	15	35	DEC 12,1974	
5.455	489.448	15	36	DEC 12,1974	
5.472	489.495	15	37	DEC 12,1974	
5.489	489.495	15	38	DEC 12,1974	
5.505	489.587	15	39	DEC 12,1974	
5.522	489.587	15	40	DEC 12,1974	
5.539	489.634	15	41	DEC 12,1974	
5.555	489.680	15	42	DEC 12,1974	
5.572	489.680	15	43	DEC 12,1974	
5.588	489.726	15	44	DEC 12,1974	
5.605	489.726	15	45	DEC 12,1974	
5.622	489.680	15	46	DEC 12,1974	
5.638	489.773	15	47	DEC 12,1974	
5.655	489.865	15	48	DEC 12,1974	
5.672	489.912	15	49	DEC 12,1974	61 G/M ANNULUS
5.688	489.912	15	50	DEC 12,1974	
5.705	489.865	15	51	DEC 12,1974	
5.722	489.958	15	52	DEC 12,1974	
5.738	489.958	15	53	DEC 12,1974	
5.755	490.097	15	54	DEC 12,1974	
5.771	490.051	15	55	DEC 12,1974	
5.788	490.097	15	56	DEC 12,1974	
5.805	490.097	15	57	DEC 12,1974	
5.821	490.097	15	58	DEC 12,1974	
5.838	490.190	15	59	DEC 12,1974	
5.855	490.190	16	00	DEC 12,1974	
5.871	490.190	16	01	DEC 12,1974	
5.888	490.232	16	02	DEC 12,1974	
5.905	490.236	16	03	DEC 12,1974	
5.921	490.236	16	04	DEC 12,1974	
5.938	490.236	16	05	DEC 12,1974	
5.954	490.282	16	06	DEC 12,1974	
5.971	490.329	16	07	DEC 12,1974	

JOB NUMBER
SPG-11210-U

DATE OF JO
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF RU
DECEMBER 13, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
5.988	490.329	16	08	DEC 12,1974	
6.004	490.421	16	09	DEC 12,1974	DECLINE
6.021	490.375	16	10	DEC 12,1974	
6.038	490.421	16	11	DEC 12,1974	
6.054	490.421	16	12	DEC 12,1974	
6.071	490.514	16	13	DEC 12,1974	
6.087	490.514	16	14	DEC 12,1974	
6.104	490.514	16	15	DEC 12,1974	
6.121	490.514	16	16	DEC 12,1974	
6.137	490.560	16	17	DEC 12,1974	
6.154	490.560	16	18	DEC 12,1974	
6.171	490.560	16	19	DEC 12,1974	
6.187	490.560	16	20	DEC 12,1974	
6.204	490.560	16	21	DEC 12,1974	
6.221	490.607	16	22	DEC 12,1974	
6.237	490.607	16	23	DEC 12,1974	
6.254	490.653	16	24	DEC 12,1974	
6.270	490.653	16	25	DEC 12,1974	
6.287	490.699	16	26	DEC 12,1974	
6.304	490.792	16	27	DEC 12,1974	
6.320	490.653	16	28	DEC 12,1974	
6.337	490.792	16	29	DEC 12,1974	
6.354	490.838	16	30	DEC 12,1974	
6.370	490.746	16	31	DEC 12,1974	
6.387	490.699	16	32	DEC 12,1974	
6.403	490.838	16	33	DEC 12,1974	
6.420	491.209	16	34	DEC 12,1974	2 G/M INSIDE
6.437	494.499	16	35	DEC 12,1974	DRILL PIPE
6.453	497.325	16	36	DEC 12,1974	
6.470	500.106	16	37	DEC 12,1974	
6.487	502.654	16	38	DEC 12,1974	
6.503	504.971	16	39	DEC 12,1974	
6.520	507.102	16	40	DEC 12,1974	
6.537	509.141	16	41	DEC 12,1974	
6.553	511.226	16	42	DEC 12,1974	
6.570	512.987	16	43	DEC 12,1974	
6.587	514.748	16	44	DEC 12,1974	
6.603	516.230	16	45	DEC 12,1974	
6.620	517.759	16	46	DEC 12,1974	
6.636	519.010	16	47	DEC 12,1974	

```
JOB NUMBER                                                            DATE OF JOB
SPG-11210-U                                                     DECEMBER 12, 1974

GAUGE/RUN NUMBER                                                      DATE OF RUN
133  RUN NO, 21                                                 DECEMBER 18, 1974

                                   SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA     PRESSURE                        TIME      DATE            COMMENTS
      TIME       (PSI)                         HR MIN

      6,653      520,354                       16   48 DEC 12,1974
      6.670      521,559                       16   49 DEC 12,1974
      6.686      522,717                       16   50 DEC 12,1974
      6.703      523,763                       16   51 DEC 12,1974
      6,720      524,302                       16   52 DEC 12,1974
      6.736      525.365                       16   53 DEC 12,1974
      6.753      528,973                       16   54 DEC 12.1974   5 G/M INSIDE
      6,769      533.236                       16   55 DEC 12,1974   DRILL PIPE
      6.786      537,220                       16   56 DEC 12,1974
      6,803      540,927                       16   57 DEC 12,1974
      6,819      544,217                       16   58 DEC 12,1974
      6.836      547,322                       16   59 DEC 12,1974
      6.853      550,330                       17   00 DEC 12,1974
      6.869      553,253                       17   01 DEC 12,1974
      6,886      555,801                       17   02 DEC 12,1974
      6,902      558,442                       17   03 DEC 12,1974
      6,919      560,991                       17   04 DEC 12,1974
      6,936      563,307                       17   05 DEC 12,1974
      6,952      565,485                       17   06 DEC 12,1974
      6,969      567,663                       17   07 DEC 12,1974
      6,986      569,516                       17   08 DEC 12,1974
      7,002      571,694                       17   09 DEC 12,1974
      7.019      573,409                       17   10 DEC 12,1974
      7,036      575,262                       17   11 DEC 12,1974
      7,052      576.976                       17   12 DEC 12,1974
      7,069      576,976                       17   13 DEC 12,1974
      7,085      581,147                       17   14 DEC 12,1974   11 G/M INSIDE
      7,102      591,155                       17   15 DEC 12,1974   DRILL PIPE
      7,119      601,349                       17   16 DEC 12,1974
      7,135      610,523                       17   17 DEC 12,1974
      7.152      619,327                       17   18 DEC 12,1974
      7.169      627,307                       17   19 DEC 12,1974
      7.185      635,823                       17   20 DEC 12,1974
      7,202      643,561                       17   21 DEC 12,1974
      7,218      648,750                       17   22 DEC 12,1974
      7,235      649,770                       17   23 DEC 12,1974
      7,252      656,859                       17   24 DEC 12,1974
      7.268      663.624                       17   25 DEC 12,1974
      7,285      664,958                       17   26 DEC 12,1974
      7,302      665,663                       17   27 DEC 12,1974   OVERFLOW
```

JOB NUMBER
SPG-11210-U

DATE OF JC
DECEMBER 12, 197

GAUGE/RUN NUMBER
133 RUN NO. 21

DATE OF RU
DECEMBER 18, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.313	666,219	17	28	DEC 12,1974	
7,335	667,702	17	29	DEC 12,1974	
7,352	667,702	17	30	DEC 12,1974	
7.368	668,350	17	31	DEC 12,1974	
7,385	668,026	17	32	DEC 12,1974	
7,401	668,953	17	33	DEC 12,1974	
7,418	669,926	17	34	DEC 12,1974	DECLINE
7,435	667,424	17	35	DEC 12,1974	
7,451	657.462	17	36	DEC 12,1974	
7,468	649,816	17	37	DEC 12,1974	
7,485	642,310	17	38	DEC 12,1974	
7.501	634,989	17	39	DEC 12,1974	
7,518	628,038	17	40	DEC 12,1974	
7.534	621.505	17	41	DEC 12,1974	
7,551	615.342	17	42	DEC 12,1974	
7,568	609.643	17	43	DEC 12,1974	
7,584	604.129	17	44	DEC 12,1974	
7.601	598,940	17	45	DEC 12,1974	
7,618	594,028	17	46	DEC 12,1974	
7,634	589,302	17	47	DEC 12,1974	
7,651	584,992	17	48	DEC 12,1974	
7.668	580,659	17	49	DEC 12,1974	
7.684	576.930	17	50	DEC 12,1974	
7,701	572,992	17	51	DEC 12,1974	
7,717	569,192	17	52	DEC 12,1974	
7,734	565,717	17	53	DEC 12,1974	
7,751	562,427	17	54	DEC 12,1974	
7,767	559,276	17	55	DEC 12,1974	
7,784	556,450	17	56	DEC 12,1974	
7,801	553,531	17	57	DEC 12,1974	
7,817	550,936	17	58	DEC 12,1974	
7,834	548,430	17	59	DEC 12,1974	
7,851	546,117	18	00	DEC 12,1974	
7.867	543,800	18	01	DEC 12,1974	
7,884	541,854	18	02	DEC 12,1974	
7,900	539,676	18	03	DEC 12,1974	
7.917	537,730	18	04	DEC 12,1974	
7,934	535,830	18	05	DEC 12,1974	
7,950	534,070	18	06	DEC 12,1974	
7,967	532,401	18	07	DEC 12,1974	

```
JOB NUMBER                                                    DATE OF JOB
SPG-11210-U                                              DECEMBER 12, 1974

GAUGE/RUN NUMBER                                              DATE OF RUN
133  RUN NO. 21                                          DECEMBER 18, 1974

                                  SPERRY-SUN
                   PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                TIME     DATE              COMMENTS
     TIME      (PSI)                 HR MIN

     7.984     530.733               18  08 DEC 12,1974
     8.000     529.156               18  09 DEC 12,1974
     8.017     527.722               18  10 DEC 12,1974
     8.033     526.378               18  11 DEC 12,1974
     8.050     524.938               18  12 DEC 12,1974
     8.067     523.596               18  13 DEC 12,1974
     8.083     522.439               18  14 DEC 12,1974
     8.100     521.327               18  15 DEC 12,1974   END OPEN
```

```
                    488 POINTS REPORTED THIS RUN

                              PAGE 14
```

JOHNSTON
Schlumberger

technical report

RECEIVED
DEC 23 1974
A. J. ROGERS

II B-1094

COMPANY ATLANTIC RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 24
COUNTY RIO BLANCO
STATE COLORADO

F.R. #09108 C

JOHNSTON
...found a better way

SURFACE INFORMATION

cription (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	0704	-	-
CLOSED FOR INITIAL SHUT-IN	0706	-	-
FINISHED SHUT-IN	0736	-	-
RE-OPENED TOOL	0740	-	-
INJECTED WATER AT 2GAL./MIN.	1335	-	-
INCREASED INJECTION TO 5 GAL./MIN.	1355	-	-
INCREASED INJECTION TO 11 GAL./MIN.	1415	-	-
DECREASED INJECTION TO 8 GAL./MIN.	1423	-	-
STOPPED INJECTIONS	1435	-	-
CLOSED FOR FINAL SHUT-IN	1635	-	-
PULLED PACKER LOOSE	1642	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 61 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1622 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 266' I.D. -
Drill Pipe Length 1247' I.D. -
Packer Depth(s) 1557 & 1561 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202
mpany ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S-G #17 Location 436'FWL 181'FSL SEC.16-3S-56W
Test Interval 1561' TO 1622' Test # 24 Date 12-14-74
II B-1095
County RIO BLANCO State COLORADO
Technician TAYLOR(VERNAL) Test Approved By MR. L. M. POWERS
Field Report No. 09108 C
No. Reports Requested 14(13x)

PRESSURE DATA

Instrument No.		32342 N	4372 N	
Capacity (P.S.I.G.)		2650	2800	
Instrument Depth		1536'	1563'	
Instrument Opening		INSIDE	OUTSIDE	
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.		–	–	
Initial Hydrostatic Mud	A	–	–	
Initial Shut-in	B	–	–	
Initial Flow	C	–	–	
Final Flow	D	–	–	
Final Shut-in	E	–	–	
Final Hydrostatic Mud	F	–	–	

Field Report No. 09108 C

TIME DATA

Time Given	Time Computed
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.
– Mins.	Mins.

Remarks:

NO PRESSURES OBTAINED DUE TO FAILURE OF STYLUS TO MARK.

*Shut in pressure did not reach static reservoir pressure.

Clock Travel __________ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$

JOHNSTON

FIELD REPORT NO.	RECORDER NO.	I
09108 C	32342 N	
CAPACITY	REPORTS REQUESTED	
2650#	14+	

JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09108 C	4372 N
CAPACITY	REPORTS REQUESTED
2800#	14+

D5124

SPERRY-SUN WELL SURVEYING COMPANY

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210V Date 12/14/74 Run 1 Office Casper

Customer Arco Et Al Location Sorghum Gulch

State Colorado County/[redacted] Rio Blanco

Well Sorghum Gulch No. 17 Field Tract Cb

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/[redacted]	1. 01:30	12/14/74	2.		
Depart: Well/[redacted]	1. 19:00	12/14/74	2.		17½ Hrs.
Gauge Start in Hole	1. 03:55	12/14/74	2. 05:16	12/14/74	
Gauge Out of Hole	1. 18:50	12/14/74	2. 18:23	12/14/74	15¾ Hrs.

No. Trips 1 Miles 45 Total Mileage 90

Top Gauge # 133 Element # 35335 Range 2000# Time Mode 1 min

Btm. Gauge # 194 Element # 35338 Range 2000# Time Mode 1 min

Type Tool Johnston Test Depth 1523'-1572 Zero Point Ground Level

Packer Depth 1561 Tail Pipe Depth 1622 Top Gauge Depth 1522.76

Bottom Hole Temp. 94 Atmos. Temp. 25 Bottom Gauge Depth 1572.22

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	06:32	12/14/74	Initial Hydrostatic Mud	
Packer Set	07:07	12/14/74	Initial Draw Down	
Initial Open	07:10:45	12/14/74	Initial Build-Up	
Initial Shut-In	07:12	12/14/74	Final Flow	
Start Flow	07:47	12/14/74	Final Build-Up	
Final Shut-In	16:~~22~~ 39	12/14/74	Final Hydrostatic Mud	
Packer Unseated	16:49	12/14/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge 04:06:45 04:07:45 04:08:45 Bottom Gauge 03:06:25 03:07:25 03:08:25

Remarks

II B-1098

Tom Carlton
Operator

SP-423

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 194 WITH 2000 LB. ELEMENT.

GAUGE LOCATED INSIDE D.P. BELOW PACKER.

DEPTH OF GAUGE IS 1572.22 FT.

TEST INTERVAL 1561 TO 1572 FT.

SET PACKER DEPTH IS 1561 FT.

INITIAL HYDROSTATIC IS 477.41 PSI

FINAL HYDROSTATIC IS 478.41 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

561 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                    DATE OF JOB
SPG 11210 V                                              DECEMBER 14, 1974

GAUGE/RUN NUMBER                                              DATE OF RUN
194   DST NO. 24                                          JANUARY 9, 1975

                              SPERRY-SUN
              PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA   PRESSURE                 TIME     DATE              COMMENTS
    TIME     (PSI)                  HR MIN

    0.000    199.403                07  13 DEC 14,1974   INITIAL SHUTIN
     .017    352.705                07  14 DEC 14,1974
     .033    375.024                07  15 DEC 14,1974
     .050    382.696                07  16 DEC 14,1974
     .067    385.393                07  17 DEC 14,1974
     .083    386.834                07  18 DEC 14,1974
     .100    387.671                07  19 DEC 14,1974
     .117    388.415                07  20 DEC 14,1974
     .133    388.880                07  21 DEC 14,1974
     .150    389.205                07  22 DEC 14,1974
     .167    389.438                07  23 DEC 14,1974
     .183    389.717                07  24 DEC 14,1974
     .200    389.903                07  25 DEC 14,1974
     .217    390.042                07  26 DEC 14,1974
     .233    390.228                07  27 DEC 14,1974
     .250    390.321                07  28 DEC 14,1974
     .267    390.507                07  29 DEC 14,1974
     .283    390.647                07  30 DEC 14,1974
     .300    390.740                07  31 DEC 14,1974
     .317    390.786                07  32 DEC 14,1974
     .333    390.926                07  33 DEC 14,1974
     .350    391.019                07  34 DEC 14,1974
     .367    391.112                07  35 DEC 14,1974
     .383    391.205                07  36 DEC 14,1974
     .400    391.205                07  37 DEC 14,1974
     .417    391.344                07  38 DEC 14,1974
     .433    391.391                07  39 DEC 14,1974
     .450    391.484                07  40 DEC 14,1974
     .467    391.530                07  41 DEC 14,1974
     .483    391.577                07  42 DEC 14,1974
     .500    391.577                07  43 DEC 14,1974   END OF SHUT-IN
```

31 POINTS REPORTED THIS RUN

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	68.606	07	52	DEC 14,1974	START FLOW
.017	88.600	07	53	DEC 14,1974	
.033	103.107	07	54	DEC 14,1974	
.050	119.567	07	55	DEC 14,1974	
.067	132.587	07	56	DEC 14,1974	
.083	143.002	07	57	DEC 14,1974	
.100	153.138	07	58	DEC 14,1974	
.117	160.996	07	59	DEC 14,1974	
.133	167.553	08	00	DEC 14,1974	
.150	171.319	08	01	DEC 14,1974	
.167	173.923	08	02	DEC 14,1974	
.183	180.060	08	03	DEC 14,1974	
.200	181.548	08	04	DEC 14,1974	
.217	192.150	08	05	DEC 14,1974	
.233	198.008	08	06	DEC 14,1974	
.250	203.681	08	07	DEC 14,1974	
.267	209.400	08	08	DEC 14,1974	
.283	215.259	08	09	DEC 14,1974	
.300	221.025	08	10	DEC 14,1974	
.317	226.418	08	11	DEC 14,1974	
.333	231.719	08	12	DEC 14,1974	
.350	236.787	08	13	DEC 14,1974	
.367	241.855	08	14	DEC 14,1974	
.383	246.831	08	15	DEC 14,1974	
.400	251.713	08	16	DEC 14,1974	
.417	256.316	08	17	DEC 14,1974	
.433	260.919	08	18	DEC 14,1974	
.450	265.569	08	19	DEC 14,1974	
.467	270.079	08	20	DEC 14,1974	
.483	273.427	08	21	DEC 14,1974	
.500	277.891	08	22	DEC 14,1974	
.517	282.122	08	23	DEC 14,1974	
.533	286.307	08	24	DEC 14,1974	
.550	289.562	08	25	DEC 14,1974	
.567	293.700	08	26	DEC 14,1974	
.583	297.745	08	27	DEC 14,1974	
.600	301.790	08	28	DEC 14,1974	
.617	307.045	08	29	DEC 14,1974	
.633	309.370	08	30	DEC 14,1974	
.650	313.136	08	31	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
.667	316.902	08	32	DEC 14,1974	
.683	320.575	08	33	DEC 14,1974	
.700	323.040	08	34	DEC 14,1974	
.717	326.760	08	35	DEC 14,1974	
.733	330.340	08	36	DEC 14,1974	
.750	329.224	08	37	DEC 14,1974	
.767	337.128	08	38	DEC 14,1974	
.783	340.383	08	39	DEC 14,1974	
.800	343.778	08	40	DEC 14,1974	
.817	346.939	08	41	DEC 14,1974	
.833	350.148	08	42	DEC 14,1974	
.850	353.170	08	43	DEC 14,1974	
.867	356.146	08	44	DEC 14,1974	
.883	359.168	08	45	DEC 14,1974	
.900	362.004	08	46	DEC 14,1974	
.917	364.794	08	47	DEC 14,1974	
.933	367.584	08	48	DEC 14,1974	
.950	370.142	08	49	DEC 14,1974	
.967	372.699	08	50	DEC 14,1974	
.983	375.163	08	51	DEC 14,1974	
1.000	377.721	08	52	DEC 14,1974	
1.017	380.138	08	53	DEC 14,1974	
1.033	382.603	08	54	DEC 14,1974	
1.050	384.928	08	55	DEC 14,1974	
1.067	387.299	08	56	DEC 14,1974	
1.083	388.136	08	57	DEC 14,1974	
1.100	389.577	08	58	DEC 14,1974	
1.117	391.809	08	59	DEC 14,1974	
1.133	394.041	09	00	DEC 14,1974	
1.150	396.134	09	01	DEC 14,1974	
1.167	398.365	09	02	DEC 14,1974	
1.183	400.458	09	03	DEC 14,1974	
1.200	402.597	09	04	DEC 14,1974	
1.217	404.596	09	05	DEC 14,1974	
1.233	406.549	09	06	DEC 14,1974	
1.250	408.455	09	07	DEC 14,1974	
1.267	410.362	09	08	DEC 14,1974	
1.283	412.315	09	09	DEC 14,1974	
1.300	414.128	09	10	DEC 14,1974	
1.317	415.941	09	11	DEC 14,1974	

JOB NUMBER SPG 11210 V	DATE OF JOB DECEMBER 14, 1974
GAUGE/RUN NUMBER 194 DST NO. 24	DATE OF RUN JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.333	417.801	09	12	DEC 14,1974	
1.350	419.522	09	13	DEC 14,1974	
1.367	421.382	09	14	DEC 14,1974	
1.383	423.056	09	15	DEC 14,1974	
1.400	424.776	09	16	DEC 14,1974	
1.417	426.403	09	17	DEC 14,1974	
1.433	428.124	09	18	DEC 14,1974	
1.450	429.658	09	19	DEC 14,1974	
1.467	431.379	09	20	DEC 14,1974	END RECOVERY
1.483	432.866	09	21	DEC 14,1974	
1.500	434.308	09	22	DEC 14,1974	
1.517	435.656	09	23	DEC 14,1974	
1.533	437.051	09	24	DEC 14,1974	
1.550	438.493	09	25	DEC 14,1974	
1.567	439.888	09	26	DEC 14,1974	
1.583	441.096	09	27	DEC 14,1974	
1.600	442.259	09	28	DEC 14,1974	
1.617	443.514	09	29	DEC 14,1974	
1.633	444.723	09	30	DEC 14,1974	
1.650	446.025	09	31	DEC 14,1974	
1.667	447.188	09	32	DEC 14,1974	
1.683	448.257	09	33	DEC 14,1974	
1.700	449.280	09	34	DEC 14,1974	
1.717	450.442	09	35	DEC 14,1974	
1.733	451.558	09	36	DEC 14,1974	
1.750	452.581	09	37	DEC 14,1974	
1.767	453.651	09	38	DEC 14,1974	
1.783	454.627	09	39	DEC 14,1974	
1.800	455.604	09	40	DEC 14,1974	
1.817	456.534	09	41	DEC 14,1974	
1.833	457.557	09	42	DEC 14,1974	
1.850	458.486	09	43	DEC 14,1974	
1.867	459.416	09	44	DEC 14,1974	
1.883	460.300	09	45	DEC 14,1974	
1.900	461.276	09	46	DEC 14,1974	
1.917	462.067	09	47	DEC 14,1974	
1.933	462.997	09	48	DEC 14,1974	
1.950	463.834	09	49	DEC 14,1974	
1.967	464.624	09	50	DEC 14,1974	
1.983	465.461	09	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.000	465.973	09	52	DEC 14,1974	
2.017	466.949	09	53	DEC 14,1974	
2.033	467.693	09	54	DEC 14,1974	
2.050	468.437	09	55	DEC 14,1974	
2.067	469.088	09	56	DEC 14,1974	
2.083	469.878	09	57	DEC 14,1974	
2.100	470.576	09	58	DEC 14,1974	
2.117	471.320	09	59	DEC 14,1974	
2.133	471.924	10	00	DEC 14,1974	
2.150	472.575	10	01	DEC 14,1974	
2.167	473.087	10	02	DEC 14,1974	
2.183	473.738	10	03	DEC 14,1974	
2.200	474.389	10	04	DEC 14,1974	
2.217	474.900	10	05	DEC 14,1974	
2.233	475.505	10	06	DEC 14,1974	
2.250	476.062	10	07	DEC 14,1974	
2.267	476.620	10	08	DEC 14,1974	
2.283	477.178	10	09	DEC 14,1974	
2.300	477.736	10	10	DEC 14,1974	
2.317	478.248	10	11	DEC 14,1974	
2.333	478.713	10	12	DEC 14,1974	
2.350	479.178	10	13	DEC 14,1974	
2.367	479.689	10	14	DEC 14,1974	
2.383	480.294	10	15	DEC 14,1974	
2.400	480.805	10	16	DEC 14,1974	
2.417	481.735	10	17	DEC 14,1974	
2.433	482.293	10	18	DEC 14,1974	
2.450	483.223	10	19	DEC 14,1974	
2.467	483.735	10	20	DEC 14,1974	
2.483	484.571	10	21	DEC 14,1974	
2.500	485.455	10	22	DEC 14,1974	
2.517	485.873	10	23	DEC 14,1974	
2.533	487.036	10	24	DEC 14,1974	
2.550	487.873	10	25	DEC 14,1974	
2.567	488.617	10	26	DEC 14,1974	
2.583	488.896	10	27	DEC 14,1974	
2.600	489.640	10	28	DEC 14,1974	
2.617	489.919	10	29	DEC 14,1974	
2.633	490.198	10	30	DEC 14,1974	
2.650	490.430	10	31	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
2.667	491.174	10	32	DEC 14,1974	
2.683	491.453	10	33	DEC 14,1974	
2.700	491.593	10	34	DEC 14,1974	
2.717	491.825	10	35	DEC 14,1974	
2.733	492.011	10	36	DEC 14,1974	
2.750	492.290	10	37	DEC 14,1974	
2.767	492.476	10	38	DEC 14,1974	
2.783	492.616	10	39	DEC 14,1974	
2.800	492.848	10	40	DEC 14,1974	
2.817	493.127	10	41	DEC 14,1974	
2.833	493.266	10	42	DEC 14,1974	
2.850	493.452	10	43	DEC 14,1974	
2.867	493.592	10	44	DEC 14,1974	
2.883	493.824	10	45	DEC 14,1974	
2.900	494.057	10	46	DEC 14,1974	
2.917	494.150	10	47	DEC 14,1974	
2.933	494.336	10	48	DEC 14,1974	
2.950	494.475	10	49	DEC 14,1974	
2.967	494.615	10	50	DEC 14,1974	
2.983	495.080	10	51	DEC 14,1974	
3.000	509.913	10	52	DEC 14,1974	
3.017	533.347	10	53	DEC 14,1974	
3.033	484.571	10	54	DEC 14,1974	
3.050	461.090	10	55	DEC 14,1974	
3.067	411.896	10	56	DEC 14,1974	
3.083	406.735	10	57	DEC 14,1974	
3.100	405.944	10	58	DEC 14,1974	
3.117	407.990	10	59	DEC 14,1974	
3.133	412.361	11	00	DEC 14,1974	
3.150	415.383	11	01	DEC 14,1974	
3.167	418.034	11	02	DEC 14,1974	
3.183	420.033	11	03	DEC 14,1974	
3.200	422.451	11	04	DEC 14,1974	
3.217	424.683	11	05	DEC 14,1974	
3.233	426.915	11	06	DEC 14,1974	
3.250	429.054	11	07	DEC 14,1974	
3.267	431.100	11	08	DEC 14,1974	
3.283	433.006	11	09	DEC 14,1974	
3.300	434.354	11	10	DEC 14,1974	
3.317	436.493	11	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
3.333	438.260	11	12	DEC 14,1974	
3.350	439.888	11	13	DEC 14,1974	
3.367	441.468	11	14	DEC 14,1974	
3.383	443.049	11	15	DEC 14,1974	
3.400	444.491	11	16	DEC 14,1974	
3.417	481.735	11	17	DEC 14,1974	
3.433	481.642	11	18	DEC 14,1974	
3.450	470.529	11	19	DEC 14,1974	
3.467	460.811	11	20	DEC 14,1974	
3.483	459.974	11	21	DEC 14,1974	
3.500	460.811	11	22	DEC 14,1974	
3.517	460.904	11	23	DEC 14,1974	
3.533	461.090	11	24	DEC 14,1974	
3.550	460.997	11	25	DEC 14,1974	
3.567	460.625	11	26	DEC 14,1974	
3.583	458.905	11	27	DEC 14,1974	
3.600	457.836	11	28	DEC 14,1974	
3.617	457.696	11	29	DEC 14,1974	
3.633	448.815	11	30	DEC 14,1974	
3.650	430.635	11	31	DEC 14,1974	
3.667	425.845	11	32	DEC 14,1974	
3.683	423.334	11	33	DEC 14,1974	
3.700	423.288	11	34	DEC 14,1974	
3.717	424.404	11	35	DEC 14,1974	
3.733	425.008	11	36	DEC 14,1974	
3.750	425.101	11	37	DEC 14,1974	
3.767	425.334	11	38	DEC 14,1974	
3.783	425.613	11	39	DEC 14,1974	
3.800	425.520	11	40	DEC 14,1974	
3.817	425.706	11	41	DEC 14,1974	
3.833	425.473	11	42	DEC 14,1974	
3.850	425.520	11	43	DEC 14,1974	
3.867	425.473	11	44	DEC 14,1974	
3.883	425.380	11	45	DEC 14,1974	
3.900	425.334	11	46	DEC 14,1974	
3.917	425.334	11	47	DEC 14,1974	
3.933	425.287	11	48	DEC 14,1974	
3.950	425.148	11	49	DEC 14,1974	
3.967	425.241	11	50	DEC 14,1974	
3.983	425.427	11	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.000	425.380	11	52	DEC 14,1974	
4.017	425.194	11	53	DEC 14,1974	
4.033	425.287	11	54	DEC 14,1974	
4.050	425.241	11	55	DEC 14,1974	
4.067	425.241	11	56	DEC 14,1974	
4.083	425.194	11	57	DEC 14,1974	
4.100	425.101	11	58	DEC 14,1974	
4.117	425.380	11	59	DEC 14,1974	
4.133	425.334	12	00	DEC 14,1974	
4.150	425.148	12	01	DEC 14,1974	
4.167	425.101	12	02	DEC 14,1974	
4.183	425.101	12	03	DEC 14,1974	
4.200	425.241	12	04	DEC 14,1974	
4.217	425.241	12	05	DEC 14,1974	
4.233	425.101	12	06	DEC 14,1974	
4.250	425.566	12	07	DEC 14,1974	
4.267	425.520	12	08	DEC 14,1974	
4.283	425.473	12	09	DEC 14,1974	
4.300	425.427	12	10	DEC 14,1974	
4.317	425.241	12	11	DEC 14,1974	
4.333	425.101	12	12	DEC 14,1974	
4.350	424.915	12	13	DEC 14,1974	
4.367	424.962	12	14	DEC 14,1974	
4.383	424.915	12	15	DEC 14,1974	
4.400	425.008	12	16	DEC 14,1974	
4.417	425.101	12	17	DEC 14,1974	
4.433	413.105	12	18	DEC 14,1974	
4.450	401.388	12	19	DEC 14,1974	
4.467	405.433	12	20	DEC 14,1974	
4.483	409.339	12	21	DEC 14,1974	
4.500	412.129	12	22	DEC 14,1974	
4.517	414.546	12	23	DEC 14,1974	
4.533	417.104	12	24	DEC 14,1974	
4.550	419.475	12	25	DEC 14,1974	
4.567	421.707	12	26	DEC 14,1974	
4.583	423.799	12	27	DEC 14,1974	
4.600	425.938	12	28	DEC 14,1974	
4.617	428.031	12	29	DEC 14,1974	
4.633	430.030	12	30	DEC 14,1974	
4.650	431.890	12	31	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO, 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
4.667	433.703	12	32	DEC 14,1974	
4.683	434.866	12	33	DEC 14,1974	
4.700	436.586	12	34	DEC 14,1974	
4.717	438.167	12	35	DEC 14,1974	
4.733	439.795	12	36	DEC 14,1974	
4.750	440.771	12	37	DEC 14,1974	
4.767	442.305	12	38	DEC 14,1974	
4.783	443.282	12	39	DEC 14,1974	
4.800	444.026	12	40	DEC 14,1974	
4.817	445.607	12	41	DEC 14,1974	
4.833	446.537	12	42	DEC 14,1974	
4.850	447.513	12	43	DEC 14,1974	
4.867	448.769	12	44	DEC 14,1974	
4.883	449.977	12	45	DEC 14,1974	
4.900	451.186	12	46	DEC 14,1974	
4.917	452.349	12	47	DEC 14,1974	
4.933	453.465	12	48	DEC 14,1974	
4.950	454.720	12	49	DEC 14,1974	
4.967	455.743	12	50	DEC 14,1974	
4.983	456.813	12	51	DEC 14,1974	
5.000	457.882	12	52	DEC 14,1974	
5.017	458.858	12	53	DEC 14,1974	
5.033	459.974	12	54	DEC 14,1974	
5.050	460.858	12	55	DEC 14,1974	
5.067	459.556	12	56	DEC 14,1974	
5.083	462.811	12	57	DEC 14,1974	
5.100	463.787	12	58	DEC 14,1974	
5.117	464.717	12	59	DEC 14,1974	
5.133	465.554	13	00	DEC 14,1974	
5.150	466.391	13	01	DEC 14,1974	
5.167	467.321	13	02	DEC 14,1974	
5.183	468.111	13	03	DEC 14,1974	
5.200	468.902	13	04	DEC 14,1974	
5.217	469.646	13	05	DEC 14,1974	
5.233	470.483	13	06	DEC 14,1974	
5.250	471.273	13	07	DEC 14,1974	
5.267	471.924	13	08	DEC 14,1974	
5.283	472.668	13	09	DEC 14,1974	
5.300	473.412	13	10	DEC 14,1974	
5.317	474.063	13	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.333	474.668	13	12	DEC 14,1974	
5.350	475.179	13	13	DEC 14,1974	
5.367	475.783	13	14	DEC 14,1974	
5.383	476.434	13	15	DEC 14,1974	
5.400	476.992	13	16	DEC 14,1974	
5.417	477.550	13	17	DEC 14,1974	
5.433	478.201	13	18	DEC 14,1974	
5.450	478.806	13	19	DEC 14,1974	
5.467	479.317	13	20	DEC 14,1974	
5.483	479.875	13	21	DEC 14,1974	
5.500	480.480	13	22	DEC 14,1974	
5.517	480.991	13	23	DEC 14,1974	
5.533	481.410	13	24	DEC 14,1974	
5.550	481.921	13	25	DEC 14,1974	
5.567	482.479	13	26	DEC 14,1974	
5.583	482.898	13	27	DEC 14,1974	
5.600	483.409	13	28	DEC 14,1974	
5.617	483.921	13	29	DEC 14,1974	
5.633	484.339	13	30	DEC 14,1974	
5.650	484.757	13	31	DEC 14,1974	
5.667	485.083	13	32	DEC 14,1974	
5.683	485.548	13	33	DEC 14,1974	
5.700	485.966	13	34	DEC 14,1974	
5.717	486.338	13	35	DEC 14,1974	
5.733	486.757	13	36	DEC 14,1974	
5.750	487.082	13	37	DEC 14,1974	
5.767	487.454	13	38	DEC 14,1974	
5.783	487.826	13	39	DEC 14,1974	
5.800	487.873	13	40	DEC 14,1974	
5.817	488.477	13	41	DEC 14,1974	
5.833	488.849	13	42	DEC 14,1974	
5.850	488.849	13	43	DEC 14,1974	
5.867	489.128	13	44	DEC 14,1974	
5.883	489.454	13	45	DEC 14,1974	
5.900	489.733	13	46	DEC 14,1974	
5.917	489.965	13	47	DEC 14,1974	
5.933	490.384	13	48	DEC 14,1974	
5.950	490.616	13	49	DEC 14,1974	
5.967	490.942	13	50	DEC 14,1974	
5.983	491.174	13	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
6.000	491.267	13	52	DEC 14,1974	
6.017	491.918	13	53	DEC 14,1974	
6.033	494.150	13	54	DEC 14,1974	2 GPM INJECTED
6.050	496.661	13	55	DEC 14,1974	DOWN D P
6.067	497.358	13	56	DEC 14,1974	
6.083	500.288	13	57	DEC 14,1974	
6.100	503.077	13	58	DEC 14,1974	
6.117	505.867	13	59	DEC 14,1974	
6.133	510.099	14	00	DEC 14,1974	
6.150	511.168	14	01	DEC 14,1974	
6.167	513.586	14	02	DEC 14,1974	
6.183	515.864	14	03	DEC 14,1974	
6.200	518.189	14	04	DEC 14,1974	
6.217	520.421	14	05	DEC 14,1974	
6.233	522.513	14	06	DEC 14,1974	
6.250	524.559	14	07	DEC 14,1974	
6.267	526.698	14	08	DEC 14,1974	
6.283	528.651	14	09	DEC 14,1974	
6.300	530.557	14	10	DEC 14,1974	
6.317	532.417	14	11	DEC 14,1974	
6.333	534.324	14	12	DEC 14,1974	
6.350	537.625	14	13	DEC 14,1974	
6.367	538.322	14	14	DEC 14,1974	5 GPM INJECTED
6.383	543.344	14	15	DEC 14,1974	DOWN D P
6.400	552.969	14	16	DEC 14,1974	
6.417	557.805	14	17	DEC 14,1974	
6.433	562.176	14	18	DEC 14,1974	
6.450	566.779	14	19	DEC 14,1974	
6.467	571.057	14	20	DEC 14,1974	
6.483	575.427	14	21	DEC 14,1974	
6.500	579.566	14	22	DEC 14,1974	
6.517	583.704	14	23	DEC 14,1974	
6.533	587.889	14	24	DEC 14,1974	
6.550	591.701	14	25	DEC 14,1974	
6.567	595.747	14	26	DEC 14,1974	
6.583	599.559	14	27	DEC 14,1974	
6.600	603.372	14	28	DEC 14,1974	
6.617	606.953	14	29	DEC 14,1974	
6.633	610.440	14	30	DEC 14,1974	
6.650	614.020	14	31	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.667	617.600	14	32	DEC 14,1974	8 GPM INJECTED
6.683	628.899	14	33	DEC 14,1974	DOWN D P
6.700	640.524	14	34	DEC 14,1974	
6.717	651.822	14	35	DEC 14,1974	
6.733	663.679	14	36	DEC 14,1974	
6.750	676.792	14	37	DEC 14,1974	
6.767	682.046	14	38	DEC 14,1974	
6.783	682.929	14	39	DEC 14,1974	
6.800	683.580	14	40	DEC 14,1974	PIPE OVERFLOW
6.817	683.999	14	41	DEC 14,1974	
6.833	684.371	14	42	DEC 14,1974	
6.850	684.836	14	43	DEC 14,1974	
6.867	685.068	14	44	DEC 14,1974	
6.883	685.208	14	45	DEC 14,1974	
6.900	685.487	14	46	DEC 14,1974	
6.917	685.766	14	47	DEC 14,1974	
6.933	686.044	14	48	DEC 14,1974	
6.950	686.230	14	49	DEC 14,1974	
6.967	686.509	14	50	DEC 14,1974	
6.983	686.835	14	51	DEC 14,1974	
7.000	687.160	14	52	DEC 14,1974	
7.017	687.067	14	53	DEC 14,1974	START DECLINE
7.033	683.069	14	54	DEC 14,1974	
7.050	678.512	14	55	DEC 14,1974	
7.067	674.374	14	56	DEC 14,1974	
7.083	670.375	14	57	DEC 14,1974	
7.100	666.795	14	58	DEC 14,1974	
7.117	663.540	14	59	DEC 14,1974	
7.133	660.517	15	00	DEC 14,1974	
7.150	657.449	15	01	DEC 14,1974	
7.167	654.240	15	02	DEC 14,1974	
7.183	656.147	15	03	DEC 14,1974	
7.200	648.521	15	04	DEC 14,1974	
7.217	645.824	15	05	DEC 14,1974	
7.233	642.941	15	06	DEC 14,1974	
7.250	640.291	15	07	DEC 14,1974	
7.267	637.734	15	08	DEC 14,1974	
7.283	635.037	15	09	DEC 14,1974	
7.300	632.526	15	10	DEC 14,1974	
7.317	632.526	15	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.333	627.783	15	12	DEC 14,1974	
7.350	625.365	15	13	DEC 14,1974	
7.367	623.087	15	14	DEC 14,1974	
7.383	620.762	15	15	DEC 14,1974	
7.400	618.484	15	16	DEC 14,1974	END DECLINE
7.417	616.252	15	17	DEC 14,1974	
7.433	614.160	15	18	DEC 14,1974	21 GPM DOWN
7.450	612.067	15	19	DEC 14,1974	ANNULUS
7.467	610.021	15	20	DEC 14,1974	
7.483	608.115	15	21	DEC 14,1974	
7.500	606.116	15	22	DEC 14,1974	
7.517	604.163	15	23	DEC 14,1974	
7.533	602.070	15	24	DEC 14,1974	
7.550	600.210	15	25	DEC 14,1974	
7.567	598.397	15	26	DEC 14,1974	
7.583	596.677	15	27	DEC 14,1974	
7.600	594.956	15	28	DEC 14,1974	
7.617	593.282	15	29	DEC 14,1974	
7.633	591.562	15	30	DEC 14,1974	
7.650	589.795	15	31	DEC 14,1974	
7.667	588.168	15	32	DEC 14,1974	
7.683	586.540	15	33	DEC 14,1974	
7.700	585.006	15	34	DEC 14,1974	
7.717	583.518	15	35	DEC 14,1974	
7.733	582.076	15	36	DEC 14,1974	39 GPM DOWN
7.750	580.635	15	37	DEC 14,1974	ANNULUS
7.767	579.194	15	38	DEC 14,1974	
7.783	577.799	15	39	DEC 14,1974	
7.800	576.404	15	40	DEC 14,1974	
7.817	575.009	15	41	DEC 14,1974	
7.833	573.753	15	42	DEC 14,1974	
7.850	572.451	15	43	DEC 14,1974	
7.867	571.150	15	44	DEC 14,1974	
7.883	569.987	15	45	DEC 14,1974	
7.900	568.778	15	46	DEC 14,1974	
7.917	567.709	15	47	DEC 14,1974	
7.933	566.500	15	48	DEC 14,1974	
7.950	565.337	15	49	DEC 14,1974	
7.967	564.175	15	50	DEC 14,1974	
7.983	563.106	15	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
194 DST NO. 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.000	561.990	15	52	DEC 14,1974	
8.017	560.967	15	53	DEC 14,1974	
8.033	559.944	15	54	DEC 14,1974	
8.050	558.967	15	55	DEC 14,1974	
8.067	557.944	15	56	DEC 14,1974	61 GPM DOWN
8.083	556.968	15	57	DEC 14,1974	ANNULUS
8.100	555.945	15	58	DEC 14,1974	
8.117	555.108	15	59	DEC 14,1974	
8.133	554.132	16	00	DEC 14,1974	
8.150	553.155	16	01	DEC 14,1974	
8.167	552.179	16	02	DEC 14,1974	
8.183	551.295	16	03	DEC 14,1974	
8.200	550.505	16	04	DEC 14,1974	
8.217	549.714	16	05	DEC 14,1974	
8.233	548.877	16	06	DEC 14,1974	
8.250	548.040	16	07	DEC 14,1974	
8.267	547.203	16	08	DEC 14,1974	
8.283	546.459	16	09	DEC 14,1974	
8.300	545.623	16	10	DEC 14,1974	
8.317	544.972	16	11	DEC 14,1974	
8.333	544.321	16	12	DEC 14,1974	
8.350	543.530	16	13	DEC 14,1974	
8.367	542.879	16	14	DEC 14,1974	
8.383	542.182	16	15	DEC 14,1974	
8.400	541.531	16	16	DEC 14,1974	START DECLINE
8.417	540.926	16	17	DEC 14,1974	
8.433	540.229	16	18	DEC 14,1974	
8.450	539.624	16	19	DEC 14,1974	
8.467	538.927	16	20	DEC 14,1974	
8.483	538.322	16	21	DEC 14,1974	
8.500	537.718	16	22	DEC 14,1974	
8.517	537.160	16	23	DEC 14,1974	
8.533	536.602	16	24	DEC 14,1974	
8.550	535.951	16	25	DEC 14,1974	
8.567	535.440	16	26	DEC 14,1974	
8.583	534.928	16	27	DEC 14,1974	
8.600	534.463	16	28	DEC 14,1974	
8.617	533.812	16	29	DEC 14,1974	
8.633	533.301	16	30	DEC 14,1974	
8.650	532.836	16	31	DEC 14,1974	

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.667	532.371	16	32	DEC 14,1974	
8.683	531.859	16	33	DEC 14,1974	
8.700	531.441	16	34	DEC 14,1974	
8.717	530.976	16	35	DEC 14,1974	
8.733	530.464	16	36	DEC 14,1974	END DECLINE
8.750	529.953	16	37	DEC 14,1974	
8.767	529.116	16	38	DEC 14,1974	
8.783	528.558	16	39	DEC 14,1974	
8.800	528.233	16	40	DEC 14,1974	
8.817	527.768	16	41	DEC 14,1974	END OF TEST

530 POINTS REPORTED THIS RUN

JOB NUMBER
SPG 11210 V

DATE OF JO
DECEMBER 14, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 133 WITH 2000 LB, ELEMENT,

GAUGE LOCATED OUTSIDE D,P, IN ANNULUS

ABOVE PACKER

DEPTH OF GAUGE 1522,76 FT,

TEST INTERVAL SURFACE TO 1561 FT,

SET PACKER DEPTH IS 1561 FT,

INITIAL HYDROSTATIC IS 444,40 PSI

FINAL HYDROSTATIC IS 448,66 PSI

GROUND LEVEL REFERENCE IS 7036 FT,

561 POINTS REPORTED THIS JOB

PAGE 1 OF 16 PAGES

```
JOB NUMBER                                                  DATE OF JO
SPG 11210 V                                           DECEMBER 14, 197

GAUGE/RUN NUMBER                                           DATE OF RU
133   DST  24                                          JANUARY 20, 197

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA   PRESSURE                 TIME     DATE            COMMENTS
     TIME     (PSI)                  HR MIN

     0.000    457.005                07  13 DEC 14,1974   INITIAL SHUTIN
      .017    457.098                07  14 DEC 14,1974
      .033    457.191                07  15 DEC 14,1974
      .050    457.191                07  16 DEC 14,1974
      .067    457.237                07  17 DEC 14,1974
      .083    457.191                07  18 DEC 14,1974
      .100    457.284                07  19 DEC 14,1974
      .117    457.284                07  20 DEC 14,1974
      .133    457.237                07  21 DEC 14,1974
      .150    457.330                07  22 DEC 14,1974
      .167    457.423                07  23 DEC 14,1974
      .183    457.284                07  24 DEC 14,1974
      .200    457.330                07  25 DEC 14,1974
      .217    457.376                07  26 DEC 14,1974
      .233    457.376                07  27 DEC 14,1974
      .250    457.423                07  28 DEC 14,1974
      .267    457.376                07  29 DEC 14,1974
      .283    457.423                07  30 DEC 14,1974
      .300    457.469                07  31 DEC 14,1974
      .317    457.423                07  32 DEC 14,1974
      .333    457.469                07  33 DEC 14,1974
      .350    457.423                07  34 DEC 14,1974
      .367    457.423                07  35 DEC 14,1974
      .383    457.515                07  36 DEC 14,1974
      .400    457.515                07  37 DEC 14,1974
      .417    457.515                07  38 DEC 14,1974
      .433    457.562                07  39 DEC 14,1974
      .450    457.469                07  40 DEC 14,1974
      .467    457.469                07  41 DEC 14,1974
      .483    457.608                07  42 DEC 14,1974
      .500    457.562                07  43 DEC 14,1974   END SHUTIN
```

```
                    31 POINTS REPORTED THIS RUN

                              PAGE  2
```

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	458.118	07	52	DEC 14,1974	START FLOW
.017	458.350	07	53	DEC 14,1974	
.033	458.350	07	54	DEC 14,1974	
.050	458.211	07	55	DEC 14,1974	
.067	458.350	07	56	DEC 14,1974	
.083	458.350	07	57	DEC 14,1974	
.100	458.350	07	58	DEC 14,1974	
.117	458.396	07	59	DEC 14,1974	
.133	458.303	08	00	DEC 14,1974	
.150	458.350	08	01	DEC 14,1974	
.167	458.396	08	02	DEC 14,1974	
.183	458.350	08	03	DEC 14,1974	
.200	458.396	08	04	DEC 14,1974	
.217	458.443	08	05	DEC 14,1974	
.233	458.443	08	06	DEC 14,1974	
.250	458.396	08	07	DEC 14,1974	
.267	458.396	08	08	DEC 14,1974	
.283	458.350	08	09	DEC 14,1974	
.300	458.489	08	10	DEC 14,1974	
.317	458.443	08	11	DEC 14,1974	
.333	458.489	08	12	DEC 14,1974	
.350	458.535	08	13	DEC 14,1974	
.367	458.535	08	14	DEC 14,1974	
.383	458.582	08	15	DEC 14,1974	
.400	458.628	08	16	DEC 14,1974	
.417	458.535	08	17	DEC 14,1974	
.433	458.582	08	18	DEC 14,1974	
.450	458.535	08	19	DEC 14,1974	
.467	458.674	08	20	DEC 14,1974	
.483	458.628	08	21	DEC 14,1974	
.500	458.628	08	22	DEC 14,1974	
.517	458.628	08	23	DEC 14,1974	
.533	458.628	08	24	DEC 14,1974	
.550	458.628	08	25	DEC 14,1974	
.567	458.582	08	26	DEC 14,1974	
.583	458.628	08	27	DEC 14,1974	
.600	458.674	08	28	DEC 14,1974	
.617	458.721	08	29	DEC 14,1974	
.633	458.674	08	30	DEC 14,1974	
.650	458.674	08	31	DEC 14,1974	

```
JOB NUMBER                                                     DATE OF JOB
SPG 11210 V                                               DECEMBER 14, 1974

GAUGE/RUN NUMBER                                                DATE OF RUN
133   DST   24                                             JANUARY 20, 1975

                                SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA     PRESSURE                  TIME      DATE               COMMENTS
     TIME       (PSI)                   HR MIN

      .667     458.674                  08   32 DEC 14,1974
      .683     458.721                  08   33 DEC 14,1974
      .700     458.674                  08   34 DEC 14,1974
      .717     458.767                  08   35 DEC 14,1974
      .733     458.767                  08   36 DEC 14,1974
      .750     458.813                  08   37 DEC 14,1974
      .767     458.813                  08   38 DEC 14,1974
      .783     458.767                  08   39 DEC 14,1974
      .800     458.813                  08   40 DEC 14,1974
      .817     458.813                  08   41 DEC 14,1974
      .833     458.860                  08   42 DEC 14,1974
      .850     458.860                  08   43 DEC 14,1974
      .867     458.813                  08   44 DEC 14,1974
      .883     458.952                  08   45 DEC 14,1974
      .900     458.906                  08   46 DEC 14,1974
      .917     458.952                  08   47 DEC 14,1974
      .933     458.952                  08   48 DEC 14,1974
      .950     458.906                  08   49 DEC 14,1974
      .967     459.045                  08   50 DEC 14,1974
      .983     458.906                  08   51 DEC 14,1974
     1.000     458.999                  08   52 DEC 14,1974
     1.017     458.952                  08   53 DEC 14,1974
     1.033     458.952                  08   54 DEC 14,1974
     1.050     458.906                  08   55 DEC 14,1974
     1.067     458.999                  08   56 DEC 14,1974
     1.083     458.999                  08   57 DEC 14,1974
     1.100     459.092                  08   58 DEC 14,1974
     1.117     459.092                  08   59 DEC 14,1974
     1.133     459.045                  09   00 DEC 14,1974
     1.150     459.045                  09   01 DEC 14,1974
     1.167     459.184                  09   02 DEC 14,1974
     1.183     459.138                  09   03 DEC 14,1974
     1.200     459.092                  09   04 DEC 14,1974
     1.217     459.138                  09   05 DEC 14,1974
     1.233     459.092                  09   06 DEC 14,1974
     1.250     459.184                  09   07 DEC 14,1974
     1.267     459.184                  09   08 DEC 14,1974
     1.283     459.184                  09   09 DEC 14,1974
     1.300     459.138                  09   10 DEC 14,1974
     1.317     459.184                  09   11 DEC 14,1974
```

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.333	459.231	09	12	DEC 14,1974	
1.350	459.277	09	13	DEC 14,1974	
1.367	459.277	09	14	DEC 14,1974	
1.383	459.323	09	15	DEC 14,1974	
1.400	459.277	09	16	DEC 14,1974	
1.417	459.277	09	17	DEC 14,1974	
1.433	459.370	09	18	DEC 14,1974	
1.450	459.370	09	19	DEC 14,1974	
1.467	459.370	09	20	DEC 14,1974	END RECOVERY
1.483	459.370	09	21	DEC 14,1974	
1.500	459.370	09	22	DEC 14,1974	
1.517	459.462	09	23	DEC 14,1974	
1.533	459.416	09	24	DEC 14,1974	
1.550	459.462	09	25	DEC 14,1974	
1.567	459.416	09	26	DEC 14,1974	
1.583	459.416	09	27	DEC 14,1974	
1.600	459.416	09	28	DEC 14,1974	
1.617	459.555	09	29	DEC 14,1974	
1.633	459.416	09	30	DEC 14,1974	
1.650	459.509	09	31	DEC 14,1974	
1.667	459.648	09	32	DEC 14,1974	
1.683	459.602	09	33	DEC 14,1974	
1.700	459.648	09	34	DEC 14,1974	
1.717	459.741	09	35	DEC 14,1974	
1.733	459.602	09	36	DEC 14,1974	
1.750	459.602	09	37	DEC 14,1974	
1.767	459.555	09	38	DEC 14,1974	
1.783	459.648	09	39	DEC 14,1974	
1.800	459.694	09	40	DEC 14,1974	
1.817	459.694	09	41	DEC 14,1974	
1.833	459.694	09	42	DEC 14,1974	
1.850	459.741	09	43	DEC 14,1974	
1.867	459.694	09	44	DEC 14,1974	
1.883	459.648	09	45	DEC 14,1974	
1.900	459.741	09	46	DEC 14,1974	
1.917	459.741	09	47	DEC 14,1974	
1.933	459.741	09	48	DEC 14,1974	
1.950	459.787	09	49	DEC 14,1974	
1.967	459.741	09	50	DEC 14,1974	
1.983	459.787	09	51	DEC 14,1974	

```
JOB NUMBER                                                          DATE OF JO
SPG 11210 V                                                   DECEMBER 14, 197

GAUGE/RUN NUMBER                                                    DATE OF RU
133   DST   24                                                 JANUARY 20, 197

                                     SPERRY-SUN
                      PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA    PRESSURE                         TIME     DATE              COMMENTS
      TIME      (PSI)                          HR MIN

      2.000    459.926                         09  52 DEC 14,1974
      2.017    459.833                         09  53 DEC 14,1974
      2.033    459.787                         09  54 DEC 14,1974
      2.050    459.880                         09  55 DEC 14,1974
      2.067    459.880                         09  56 DEC 14,1974
      2.083    459.880                         09  57 DEC 14,1974
      2.100    459.880                         09  58 DEC 14,1974
      2.117    459.926                         09  59 DEC 14,1974
      2.133    459.972                         10  00 DEC 14,1974
      2.150    459.972                         10  01 DEC 14,1974
      2.167    459.972                         10  02 DEC 14,1974
      2.183    460.019                         10  03 DEC 14,1974
      2.200    460.019                         10  04 DEC 14,1974
      2.217    460.019                         10  05 DEC 14,1974
      2.233    459.880                         10  06 DEC 14,1974
      2.250    460.065                         10  07 DEC 14,1974
      2.267    460.065                         10  08 DEC 14,1974
      2.283    460.065                         10  09 DEC 14,1974
      2.300    460.065                         10  10 DEC 14,1974
      2.317    460.065                         10  11 DEC 14,1974
      2.333    459.972                         10  12 DEC 14,1974
      2.350    460.065                         10  13 DEC 14,1974
      2.367    460.065                         10  14 DEC 14,1974
      2.383    460.065                         10  15 DEC 14,1974
      2.400    460.111                         10  16 DEC 14,1974
      2.417    460.111                         10  17 DEC 14,1974
      2.433    460.111                         10  18 DEC 14,1974
      2.450    460.111                         10  19 DEC 14,1974
      2.467    460.158                         10  20 DEC 14,1974
      2.483    460.158                         10  21 DEC 14,1974
      2.500    460.111                         10  22 DEC 14,1974
      2.517    460.158                         10  23 DEC 14,1974
      2.533    460.204                         10  24 DEC 14,1974
      2.550    460.158                         10  25 DEC 14,1974
      2.567    460.251                         10  26 DEC 14,1974
      2.583    460.251                         10  27 DEC 14,1974
      2.600    460.204                         10  28 DEC 14,1974
      2.617    460.251                         10  29 DEC 14,1974
      2.633    460.251                         10  30 DEC 14,1974
      2.650    460.390                         10  31 DEC 14,1974
```

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.667	460.343	10	32	DEC 14,1974	
2.683	460.251	10	33	DEC 14,1974	
2.700	460.343	10	34	DEC 14,1974	
2.717	460.343	10	35	DEC 14,1974	
2.733	460.297	10	36	DEC 14,1974	
2.750	460.343	10	37	DEC 14,1974	
2.767	460.390	10	38	DEC 14,1974	
2.783	460.297	10	39	DEC 14,1974	
2.800	460.390	10	40	DEC 14,1974	
2.817	460.390	10	41	DEC 14,1974	
2.833	460.436	10	42	DEC 14,1974	
2.850	460.343	10	43	DEC 14,1974	
2.867	460.343	10	44	DEC 14,1974	
2.883	460.436	10	45	DEC 14,1974	
2.900	460.390	10	46	DEC 14,1974	
2.917	460.482	10	47	DEC 14,1974	
2.933	460.436	10	48	DEC 14,1974	
2.950	460.390	10	49	DEC 14,1974	
2.967	460.482	10	50	DEC 14,1974	
2.983	460.529	10	51	DEC 14,1974	
3.000	460.529	10	52	DEC 14,1974	
3.017	460.390	10	53	DEC 14,1974	
3.033	460.529	10	54	DEC 14,1974	
3.050	460.575	10	55	DEC 14,1974	
3.067	460.529	10	56	DEC 14,1974	
3.083	460.529	10	57	DEC 14,1974	
3.100	460.575	10	58	DEC 14,1974	
3.117	460.575	10	59	DEC 14,1974	
3.133	460.621	11	00	DEC 14,1974	
3.150	460.529	11	01	DEC 14,1974	
3.167	460.621	11	02	DEC 14,1974	
3.183	460.621	11	03	DEC 14,1974	
3.200	460.575	11	04	DEC 14,1974	
3.217	460.621	11	05	DEC 14,1974	
3.233	460.668	11	06	DEC 14,1974	
3.250	460.668	11	07	DEC 14,1974	
3.267	460.668	11	08	DEC 14,1974	
3.283	460.621	11	09	DEC 14,1974	
3.300	460.668	11	10	DEC 14,1974	
3.317	460.714	11	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
3.333	460.760	11	12	DEC 14,1974	
3.350	460.760	11	13	DEC 14,1974	
3.367	460.714	11	14	DEC 14,1974	
3.383	460.807	11	15	DEC 14,1974	
3.400	460.760	11	16	DEC 14,1974	
3.417	460.760	11	17	DEC 14,1974	
3.433	460.760	11	18	DEC 14,1974	
3.450	460.807	11	19	DEC 14,1974	
3.467	460.807	11	20	DEC 14,1974	
3.483	460.853	11	21	DEC 14,1974	
3.500	460.807	11	22	DEC 14,1974	
3.517	460.900	11	23	DEC 14,1974	
3.533	460.900	11	24	DEC 14,1974	
3.550	460.807	11	25	DEC 14,1974	
3.567	460.807	11	26	DEC 14,1974	
3.583	460.853	11	27	DEC 14,1974	
3.600	460.853	11	28	DEC 14,1974	
3.617	460.853	11	29	DEC 14,1974	
3.633	460.900	11	30	DEC 14,1974	
3.650	460.946	11	31	DEC 14,1974	
3.667	460.946	11	32	DEC 14,1974	
3.683	460.946	11	33	DEC 14,1974	
3.700	460.900	11	34	DEC 14,1974	
3.717	460.946	11	35	DEC 14,1974	
3.733	460.900	11	36	DEC 14,1974	
3.750	460.946	11	37	DEC 14,1974	
3.767	460.992	11	38	DEC 14,1974	
3.783	460.992	11	39	DEC 14,1974	
3.800	460.946	11	40	DEC 14,1974	
3.817	460.946	11	41	DEC 14,1974	
3.833	461.085	11	42	DEC 14,1974	
3.850	461.085	11	43	DEC 14,1974	
3.867	460.992	11	44	DEC 14,1974	
3.883	461.085	11	45	DEC 14,1974	
3.900	461.131	11	46	DEC 14,1974	
3.917	461.131	11	47	DEC 14,1974	
3.933	461.039	11	48	DEC 14,1974	
3.950	461.039	11	49	DEC 14,1974	
3.967	461.039	11	50	DEC 14,1974	
3.983	461.039	11	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JO
DECEMBER 14, 197

GAUGE/RUN NUMBER
133 DST 24

DATE OF RU
JANUARY 20, 197

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
4.000	461.085	11	52	DEC 14,1974	
4.017	461.131	11	53	DEC 14,1974	
4.033	461.085	11	54	DEC 14,1974	
4.050	461.131	11	55	DEC 14,1974	
4.067	461.085	11	56	DEC 14,1974	
4.083	461.178	11	57	DEC 14,1974	
4.100	461.131	11	58	DEC 14,1974	
4.117	461.178	11	59	DEC 14,1974	
4.133	461.178	12	00	DEC 14,1974	
4.150	461.178	12	01	DEC 14,1974	
4.167	461.224	12	02	DEC 14,1974	
4.183	461.178	12	03	DEC 14,1974	
4.200	461.224	12	04	DEC 14,1974	
4.217	461.270	12	05	DEC 14,1974	
4.233	461.317	12	06	DEC 14,1974	
4.250	461.363	12	07	DEC 14,1974	
4.267	461.270	12	08	DEC 14,1974	
4.283	461.270	12	09	DEC 14,1974	
4.300	461.317	12	10	DEC 14,1974	
4.317	461.363	12	11	DEC 14,1974	
4.333	461.317	12	12	DEC 14,1974	
4.350	461.363	12	13	DEC 14,1974	
4.367	461.409	12	14	DEC 14,1974	
4.383	461.409	12	15	DEC 14,1974	
4.400	461.363	12	16	DEC 14,1974	
4.417	461.317	12	17	DEC 14,1974	
4.433	461.409	12	18	DEC 14,1974	
4.450	461.363	12	19	DEC 14,1974	
4.467	461.409	12	20	DEC 14,1974	
4.483	461.409	12	21	DEC 14,1974	
4.500	461.409	12	22	DEC 14,1974	
4.517	461.409	12	23	DEC 14,1974	
4.533	461.363	12	24	DEC 14,1974	
4.550	461.456	12	25	DEC 14,1974	
4.567	461.502	12	26	DEC 14,1974	
4.583	461.502	12	27	DEC 14,1974	
4.600	461.456	12	28	DEC 14,1974	
4.617	461.363	12	29	DEC 14,1974	
4.633	461.502	12	30	DEC 14,1974	
4.650	461.595	12	31	DEC 14,1974	

JOB NUMBER
SPG 11210 V

GAUGE/RUN NUMBER
133 DST 24

DATE OF JOB
DECEMBER 14, 1974

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.667	461.549	12	32	DEC 14,1974	
4.683	461.549	12	33	DEC 14,1974	
4.700	461.549	12	34	DEC 14,1974	
4.717	461.549	12	35	DEC 14,1974	
4.733	461.502	12	36	DEC 14,1974	
4.750	461.595	12	37	DEC 14,1974	
4.767	461.595	12	38	DEC 14,1974	
4.783	461.595	12	39	DEC 14,1974	
4.800	461.595	12	40	DEC 14,1974	
4.817	461.595	12	41	DEC 14,1974	
4.833	461.595	12	42	DEC 14,1974	
4.850	461.641	12	43	DEC 14,1974	
4.867	461.641	12	44	DEC 14,1974	
4.883	461.688	12	45	DEC 14,1974	
4.900	461.641	12	46	DEC 14,1974	
4.917	461.734	12	47	DEC 14,1974	
4.933	461.734	12	48	DEC 14,1974	
4.950	461.595	12	49	DEC 14,1974	
4.967	461.780	12	50	DEC 14,1974	
4.983	461.688	12	51	DEC 14,1974	
5.000	461.734	12	52	DEC 14,1974	
5.017	461.734	12	53	DEC 14,1974	
5.033	461.734	12	54	DEC 14,1974	
5.050	461.780	12	55	DEC 14,1974	
5.067	461.780	12	56	DEC 14,1974	
5.083	461.734	12	57	DEC 14,1974	
5.100	461.780	12	58	DEC 14,1974	
5.117	461.827	12	59	DEC 14,1974	
5.133	461.688	13	00	DEC 14,1974	
5.150	461.780	13	01	DEC 14,1974	
5.167	461.780	13	02	DEC 14,1974	
5.183	461.827	13	03	DEC 14,1974	
5.200	461.827	13	04	DEC 14,1974	
5.217	461.780	13	05	DEC 14,1974	
5.233	461.919	13	06	DEC 14,1974	
5.250	461.873	13	07	DEC 14,1974	
5.267	461.873	13	08	DEC 14,1974	
5.283	461.873	13	09	DEC 14,1974	
5.300	461.966	13	10	DEC 14,1974	
5.317	461.873	13	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.333	461.873	13	12	DEC 14,1974	
5.350	461.966	13	13	DEC 14,1974	
5.367	462.012	13	14	DEC 14,1974	
5.383	462.058	13	15	DEC 14,1974	
5.400	462.012	13	16	DEC 14,1974	
5.417	462.012	13	17	DEC 14,1974	
5.433	462.012	13	18	DEC 14,1974	
5.450	462.012	13	19	DEC 14,1974	
5.467	461.966	13	20	DEC 14,1974	
5.483	462.058	13	21	DEC 14,1974	
5.500	462.058	13	22	DEC 14,1974	
5.517	462.058	13	23	DEC 14,1974	
5.533	462.058	13	24	DEC 14,1974	
5.550	462.058	13	25	DEC 14,1974	
5.567	462.058	13	26	DEC 14,1974	
5.583	462.058	13	27	DEC 14,1974	
5.600	462.105	13	28	DEC 14,1974	
5.617	462.105	13	29	DEC 14,1974	
5.633	462.105	13	30	DEC 14,1974	
5.650	462.105	13	31	DEC 14,1974	
5.667	462.105	13	32	DEC 14,1974	
5.683	462.105	13	33	DEC 14,1974	
5.700	462.105	13	34	DEC 14,1974	
5.717	462.105	13	35	DEC 14,1974	
5.733	462.198	13	36	DEC 14,1974	
5.750	462.151	13	37	DEC 14,1974	
5.767	462.244	13	38	DEC 14,1974	
5.783	462.244	13	39	DEC 14,1974	
5.800	462.198	13	40	DEC 14,1974	
5.817	462.290	13	41	DEC 14,1974	
5.833	462.337	13	42	DEC 14,1974	
5.850	462.244	13	43	DEC 14,1974	
5.867	462.290	13	44	DEC 14,1974	
5.883	462.383	13	45	DEC 14,1974	
5.900	462.290	13	46	DEC 14,1974	
5.917	462.290	13	47	DEC 14,1974	
5.933	462.244	13	48	DEC 14,1974	
5.950	462.244	13	49	DEC 14,1974	
5.967	462.244	13	50	DEC 14,1974	
5.983	462.198	13	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.000	462.244	13	52	DEC 14,1974	
6.017	462.383	13	53	DEC 14,1974	
6.033	462.383	13	54	DEC 14,1974	2 GPM INJECTED
6.050	462.429	13	55	DEC 14,1974	DOWN D P
6.067	462.383	13	56	DEC 14,1974	
6.083	462.429	13	57	DEC 14,1974	
6.100	462.383	13	58	DEC 14,1974	
6.117	462.383	13	59	DEC 14,1974	
6.133	462.429	14	00	DEC 14,1974	
6.150	462.383	14	01	DEC 14,1974	
6.167	462.383	14	02	DEC 14,1974	
6.183	462.476	14	03	DEC 14,1974	
6.200	462.429	14	04	DEC 14,1974	
6.217	462.429	14	05	DEC 14,1974	
6.233	462.476	14	06	DEC 14,1974	
6.250	462.476	14	07	DEC 14,1974	
6.267	462.476	14	08	DEC 14,1974	
6.283	462.522	14	09	DEC 14,1974	
6.300	462.522	14	10	DEC 14,1974	
6.317	462.522	14	11	DEC 14,1974	
6.333	462.476	14	12	DEC 14,1974	
6.350	462.476	14	13	DEC 14,1974	
6.367	462.522	14	14	DEC 14,1974	5 GPM INJECTED
6.383	462.568	14	15	DEC 14,1974	DOWN D P
6.400	462.522	14	16	DEC 14,1974	
6.417	462.615	14	17	DEC 14,1974	
6.433	462.615	14	18	DEC 14,1974	
6.450	462.615	14	19	DEC 14,1974	
6.467	462.615	14	20	DEC 14,1974	
6.483	462.615	14	21	DEC 14,1974	
6.500	462.615	14	22	DEC 14,1974	
6.517	462.615	14	23	DEC 14,1974	
6.533	462.615	14	24	DEC 14,1974	
6.550	462.661	14	25	DEC 14,1974	
6.567	462.661	14	26	DEC 14,1974	
6.583	462.661	14	27	DEC 14,1974	
6.600	462.661	14	28	DEC 14,1974	
6.617	462.661	14	29	DEC 14,1974	
6.633	462.707	14	30	DEC 14,1974	
6.650	462.754	14	31	DEC 14,1974	

JOB NUMBER SPG 11210 V	DATE OF JOB DECEMBER 14, 1974
GAUGE/RUN NUMBER 133 DST 24	DATE OF RUN JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.667	462.707	14	32	DEC 14,1974	8 GPM INJECTED
6.683	462.847	14	33	DEC 14,1974	DOWN D P
6.700	462.707	14	34	DEC 14,1974	
6.717	462.847	14	35	DEC 14,1974	
6.733	462.754	14	36	DEC 14,1974	
6.750	462.707	14	37	DEC 14,1974	
6.767	462.847	14	38	DEC 14,1974	
6.783	462.893	14	39	DEC 14,1974	
6.800	462.939	14	40	DEC 14,1974	PIPE OVERFLOW
6.817	462.939	14	41	DEC 14,1974	
6.833	462.986	14	42	DEC 14,1974	
6.850	463.032	14	43	DEC 14,1974	
6.867	463.032	14	44	DEC 14,1974	
6.883	463.032	14	45	DEC 14,1974	
6.900	463.032	14	46	DEC 14,1974	
6.917	463.032	14	47	DEC 14,1974	
6.933	463.078	14	48	DEC 14,1974	
6.950	463.078	14	49	DEC 14,1974	
6.967	463.264	14	50	DEC 14,1974	
6.983	463.356	14	51	DEC 14,1974	
7.000	463.449	14	52	DEC 14,1974	
7.017	463.403	14	53	DEC 14,1974	START DECLINE
7.033	463.403	14	54	DEC 14,1974	
7.050	463.310	14	55	DEC 14,1974	
7.067	463.264	14	56	DEC 14,1974	
7.083	463.125	14	57	DEC 14,1974	
7.100	463.125	14	58	DEC 14,1974	
7.117	463.264	14	59	DEC 14,1974	
7.133	463.125	15	00	DEC 14,1974	
7.150	463.078	15	01	DEC 14,1974	
7.167	463.125	15	02	DEC 14,1974	
7.183	462.986	15	03	DEC 14,1974	
7.200	462.986	15	04	DEC 14,1974	
7.217	463.125	15	05	DEC 14,1974	
7.233	463.032	15	06	DEC 14,1974	
7.250	463.032	15	07	DEC 14,1974	
7.267	463.125	15	08	DEC 14,1974	
7.283	463.125	15	09	DEC 14,1974	
7.300	463.032	15	10	DEC 14,1974	
7.317	463.032	15	11	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.333	463.078	15	12	DEC 14,1974	
7.350	463.125	15	13	DEC 14,1974	
7.367	462.986	15	14	DEC 14,1974	
7.383	463.032	15	15	DEC 14,1974	
7.400	463.125	15	16	DEC 14,1974	END DECLINE
7.417	463.032	15	17	DEC 14,1974	
7.433	464.237	15	18	DEC 14,1974	21 GPM DOWN
7.450	465.118	15	19	DEC 14,1974	ANNULUS
7.467	465.860	15	20	DEC 14,1974	
7.483	466.416	15	21	DEC 14,1974	
7.500	466.880	15	22	DEC 14,1974	
7.517	467.297	15	23	DEC 14,1974	
7.533	467.529	15	24	DEC 14,1974	
7.550	467.760	15	25	DEC 14,1974	
7.567	467.900	15	26	DEC 14,1974	
7.583	468.131	15	27	DEC 14,1974	
7.600	468.317	15	28	DEC 14,1974	
7.617	468.270	15	29	DEC 14,1974	
7.633	468.456	15	30	DEC 14,1974	
7.650	468.456	15	31	DEC 14,1974	
7.667	468.549	15	32	DEC 14,1974	
7.683	468.549	15	33	DEC 14,1974	
7.700	468.688	15	34	DEC 14,1974	
7.717	468.780	15	35	DEC 14,1974	
7.733	469.429	15	36	DEC 14,1974	39 GPM DOWN
7.750	470.449	15	37	DEC 14,1974	ANNULUS
7.767	471.237	15	38	DEC 14,1974	
7.783	472.025	15	39	DEC 14,1974	
7.800	472.628	15	40	DEC 14,1974	
7.817	472.999	15	41	DEC 14,1974	
7.833	473.509	15	42	DEC 14,1974	
7.850	473.787	15	43	DEC 14,1974	
7.867	473.370	15	44	DEC 14,1974	
7.883	472.257	15	45	DEC 14,1974	
7.900	472.860	15	46	DEC 14,1974	
7.917	473.092	15	47	DEC 14,1974	
7.933	473.509	15	48	DEC 14,1974	
7.950	473.741	15	49	DEC 14,1974	
7.967	473.926	15	50	DEC 14,1974	
7.983	474.250	15	51	DEC 14,1974	

JOB NUMBER
SPG 11210 V

DATE OF JOB
DECEMBER 14, 1974

GAUGE/RUN NUMBER
133 DST 24

DATE OF RUN
JANUARY 20, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.000	474.343	15	52	DEC 14,1974	
8.017	474.436	15	53	DEC 14,1974	
8.033	474.621	15	54	DEC 14,1974	
8.050	474.760	15	55	DEC 14,1974	
8.067	474.807	15	56	DEC 14,1974	61 GPM DOWN
8.083	476.058	15	57	DEC 14,1974	ANNULUS
8.100	477.264	15	58	DEC 14,1974	
8.117	477.820	15	59	DEC 14,1974	
8.133	478.886	16	00	DEC 14,1974	
8.150	479.535	16	01	DEC 14,1974	
8.167	480.138	16	02	DEC 14,1974	
8.183	480.694	16	03	DEC 14,1974	
8.200	481.204	16	04	DEC 14,1974	
8.217	481.575	16	05	DEC 14,1974	
8.233	481.946	16	06	DEC 14,1974	
8.250	482.085	16	07	DEC 14,1974	
8.267	482.363	16	08	DEC 14,1974	
8.283	482.641	16	09	DEC 14,1974	
8.300	482.827	16	10	DEC 14,1974	
8.317	483.105	16	11	DEC 14,1974	
8.333	483.244	16	12	DEC 14,1974	
8.350	483.429	16	13	DEC 14,1974	
8.367	483.656	16	14	DEC 14,1974	
8.383	483.888	16	15	DEC 14,1974	
8.400	482.734	16	16	DEC 14,1974	START DECLINE
8.417	479.674	16	17	DEC 14,1974	
8.433	476.893	16	18	DEC 14,1974	
8.450	474.760	16	19	DEC 14,1974	
8.467	472.767	16	20	DEC 14,1974	
8.483	471.376	16	21	DEC 14,1974	
8.500	470.171	16	22	DEC 14,1974	
8.517	469.244	16	23	DEC 14,1974	
8.533	468.363	16	24	DEC 14,1974	
8.550	467.668	16	25	DEC 14,1974	
8.567	467.065	16	26	DEC 14,1974	
8.583	466.741	16	27	DEC 14,1974	
8.600	466.277	16	28	DEC 14,1974	
8.617	466.045	16	29	DEC 14,1974	
8.633	465.674	16	30	DEC 14,1974	
8.650	465.443	16	31	DEC 14,1974	

```
JOB NUMBER                                                          DATE OF JOB
SPG 11210 V                                                   DECEMBER 14, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
133   DST   24                                                 JANUARY 20, 1975

                                 SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                    TIME     DATE              COMMENTS
    TIME      (PSI)                     HR MIN

    8.667     465.211                   16   32 DEC 14,1974
    8.683     465.025                   16   33 DEC 14,1974
    8.700     464.933                   16   34 DEC 14,1974
    8.717     464.886                   16   35 DEC 14,1974
    8.733     464.794                   16   36 DEC 14,1974   END DECLINE
    8.750     464.515                   16   37 DEC 14,1974
    8.767     464.608                   16   38 DEC 14,1974
    8.783     464.469                   16   39 DEC 14,1974
    8.800     464.423                   16   40 DEC 14,1974
    8.817     464.376                   16   41 DEC 14,1974   END TEST
```

```
                      530 POINTS REPORTED THIS RUN

                                PAGE 16
```

→ Howard Dennis / JRM

JOHNSTON

Schlumberger

technical report

RECEIVED
DEC 30 1974
A. J. ROGERS

COMPANY ATLANTIC RICHFIELD COMPANY

WELL FEDERAL S-G #17

TEST NO. 25

COUNTY RIO BLANCO

STATE COLORADO

II B-1131

F.R. 09109 C

JOHNSTON
...found a better way

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool (12-15-74)	1513	-	-
CLOSED FOR INITIAL SHUT-IN	1515	-	-
FINISHED SHUT-IN	1545	-	-
RE-OPENED TOOL	1548	-	-
STARTED INJECTING WATER			
AT 2 GAL./MIN.	2125	-	-
INCREASED INJECTION TO			
5 GAL./MIN.	2145	-	-
INCREASED INJECTION TO			
10 GAL./MIN.	2205	-	-
DECREASED INJECTION TO			
5 GAL./MIN.	2210	-	-
SLOPPED INJECTIONS	2225	-	-
(12-16-74)			
CLOSED FOR FINAL SHUT-IN	0048	-	-
PULLED PACKER LOOSE	0055	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036' Ft.
Net Productive Interval 52 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1670 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1270' I.D. -
Packer Depth(s) 1614 & 1618 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202

Company ATLANTIC RICHFIELD COMPANY
Field SORGHUM GULCH
Well FEDERAL S-G #17
Location 436' FWL 181'FSL SEC.16-3S-96W
Test Interval 1618' TO 1670'
Test # 25
Date 12-15-74

II B-1132

County RIO BLANCO
State COLORADO
Technician TAYLOR(VERNAL)
Test Approved By MR. JERRY L. BUSSELL

Field Report No. 09109 C
No. Reports Requested 14(13x)

PRESSURE DATA

Instrument No.	4372 N	32342 N	
Capacity (P.S.I.G.)	2650	2800	
Instrument Depth	1593'	1620'	
Instrument Opening	INSIDE	OUTSIDE	
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	-	-	
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09109 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

INSTRUMENT NUMBER 4372 N; NO PRESSURES RECORDED DUE TO MALFUNCTION OF INSTRUMENT.

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003695 inches per min.

PRESSURE INCREMENTS

Point inutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1	500.7		30	527.5		62	253.9	
2	528.5		31	527.5		63	256.7	
3 0	36.7		32	527.5		64	260.9	
1	46.6		33	527.5		65	266.6	
2	60.7		5 34	527.5		66	269.4	
4 3	67.7		35	531.7		67	273.6	
4	385.0		6 36	531.7		68	277.9	
5	475.3		7 37	70.5		69	280.7	
6	496.5		38	112.8		70	284.9	
7	503.5		39	128.4		71	289.1	
8	509.2		40	135.4		72	292.0	
9	513.4		41	145.3		73	294.8	
10	514.8		42	155.2		74	299.0	
11	516.2		43	159.4		75	303.2	
12	519.0		44	165.0		76	306.1	
13	520.4		45	172.1		77	308.9	
14	520.4		46	177.7		78	313.1	
15	521.9		47	182.0		79	315.9	
16	523.3		48	187.6		80	318.8	
17	523.3		49	193.2		81	323.0	
18	523.3		50	198.9		82	324.4	
19	523.3		51	203.1		83	327.2	
20	524.7		52	208.7		84	331.5	
21	524.7		53	213.0		85	334.3	
22	524.7		54	218.6		86	337.1	
23	524.7		55	224.3		87	339.9	
24	524.7		56	227.1		88	344.1	
25	526.1		57	231.3	II B-1133	89	345.6	
26	526.1		58	237.0		90	348.4	
27	526.1		59	241.2		92	354.0	
28	527.5		60	245.4		94	359.7	
29	527.5		61	249.7		CONTINUED		

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09109 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
96	365.3		160	468.3		218	441.5	
98	370.9		162	471.1		220	441.5	
100	373.8		164	472.5		222	441.5	
102	379.4		166	473.9		224	441.5	
104	385.0		168	475.3		226	441.5	
106	389.3		170	478.1		228	441.5	
108	393.5		172	481.0		230	441.5	
110	396.3		174	482.4		232	441.5	
112	400.6		176	485.2		234	441.5	
113	404.8		178	488.0		236	441.5	
116	409.0		180	489.4		238	437.2	
118	413.3		182	489.4		240	435.8	
120	416.1		184	490.8		242	435.8	
122	418.9		186	492.2		244	435.8	
124	423.1		8 187	492.2		246	435.8	
126	426.0		188	517.6		248	435.8	
128	428.8		9 189	540.2		250	435.8	
130	433.0		190	466.9		11 251	435.8	
132	435.8		192	448.5		12 252	414.7	
134	438.6		10 193	442.9		254	420.3	
136	440.1		194	442.9		256	424.5	
138	442.9		196	442.9		258	428.8	
140	445.7		198	442.9		260	433.0	
142	448.5		200	441.5		262	437.2	
144	451.3		202	441.5		264	440.1	
146	452.7		204	441.5		266	442.9	
148	455.6		206	441.5		268	445.7	
150	458.4		208	442.9	II B-1134	270	448.5	
152	459.8		210	442.9		272	451.3	
154	462.6		212	442.9		274	454.2	
156	465.4		214	444.3		276	457.0	
158	466.9		216	441.5		CONTINUED		

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09109 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
278	459.8		342	506.3		404	613.5	
280	462.6		344	507.8		406	622.0	
282	464.0		346	507.8		408	629.0	
284	465.4		348	507.8		410	637.5	
286	468.3		350	509.2		15 412	644.6	
288	471.1		352	509.2		414	668.5	
290	472.5		354	510.6		416	691.1	
292	473.9		356	510.6		418	705.2	
294	476.7		358	510.6		420	705.2	
296	478.1		360	510.6		422	706.6	
298	479.5		362	512.0		424	706.2	
300	481.0		364	512.0		426	708.0	
302	482.4		366	513.4		428	708.0	
304	485.2		368	513.4		430	708.0	
306	486.6		370	513.4		16 432	708.0	
308	488.0		372	514.8		434	702.4	
310	489.4		13 374	514.8		436	693.9	
312	490.8		376	519.0		438	689.7	
314	492.2		378	526.1		440	684.1	
316	493.7		380	531.7		442	678.4	
318	493.7		382	536.0		444	674.2	
320	495.1		384	540.2		446	668.5	
322	496.5		386	544.4		448	664.3	
324	497.9		388	550.1		450	660.1	
326	499.3		390	554.3		452	654.4	
328	499.3		392	558.5		454	651.6	
330	500.7		14 393	558.5		456	647.4	
332	500.7		394	567.0	II B-1135	458	643.2	
334	502.1		396	578.3		460	638.9	
336	502.1		398	589.6		462	634.7	
338	503.5		400	598.0		464	631.9	
340	504.9		402	606.5		CONTINUED		

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09109 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

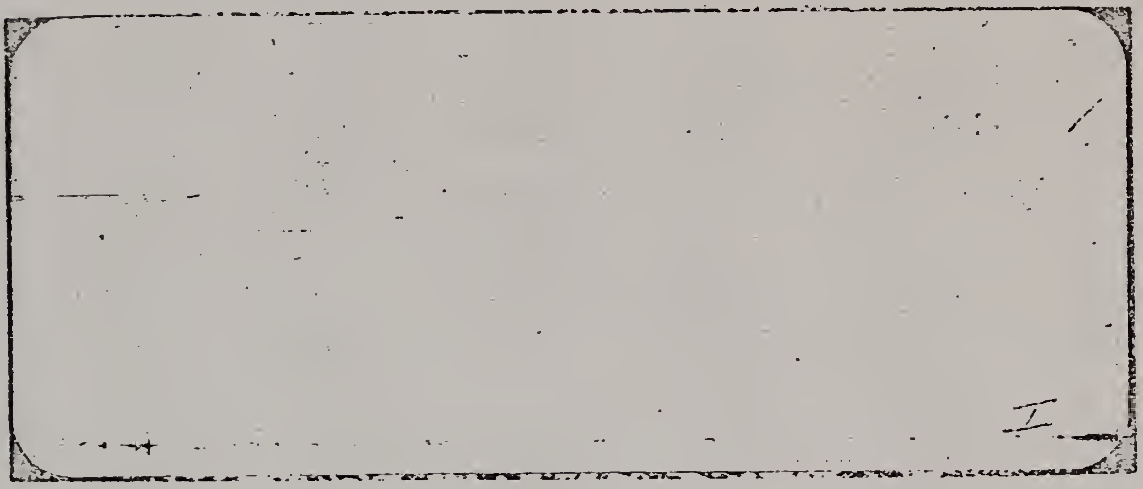
Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
466	629.0		530	564.2				
468	624.8		532	564.2				
470	622.0		534	562.8				
472	619.2		536	562.8				
474	616.4		538	561.3				
476	613.5		540	559.9				
478	610.7		542	559.9				
480	609.3		544	558.5				
482	606.5		546	557.1				
484	603.7		548	557.1				
486	600.8		550	555.7				
488	599.4		552	555.7				
490	596.6		554	555.7				
492	595.2		556	554.3				
494	591.0		558	552.9				
496	591.0		560	552.9				
498	588.1		562	552.9				
500	586.7		564	552.9				
502	583.9		566	551.5				
504	582.5		568	551.5				
506	581.1		570	550.1				
508	579.7		572	550.1				
510	578.3		17 574	548.7				
512	576.9		576	545.8				
514	575.5		578	541.6				
516	574.0		580	540.2				
518	572.6		18 582	540.2				
520	571.2		19	506.3	II B-1136			
522	569.8							
524	568.4							
526	567.0							
528	565.6							

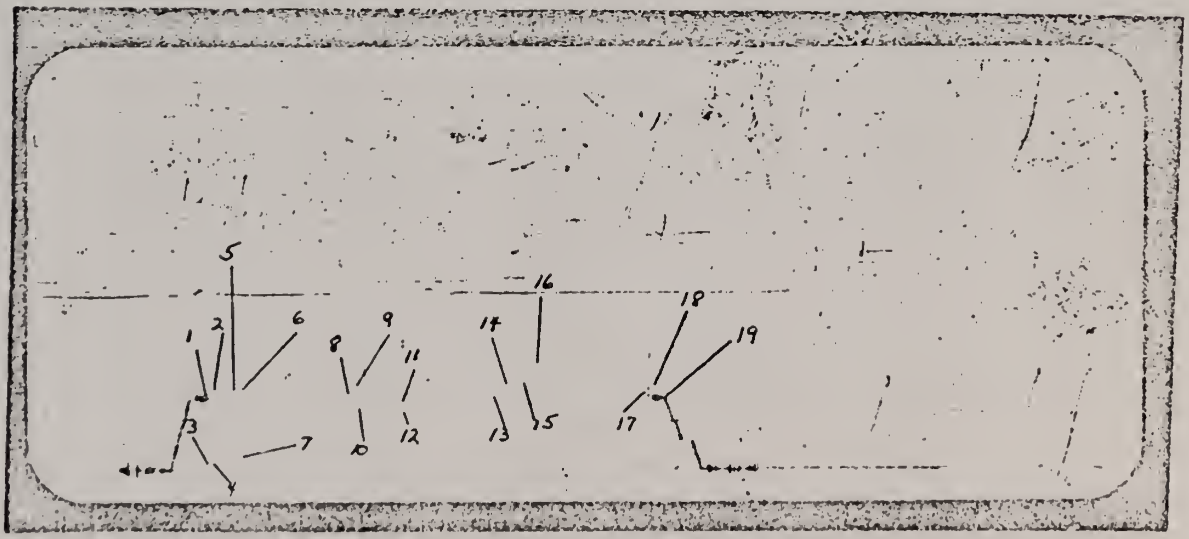
JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09109 C	4372 N
CAPACITY	REPORTS REQUESTED
2650#	14+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09109 C	32342 N
CAPACITY	REPORTS REQUESTED
2800#	14+



TEST SHEET

DS 25

Job No. SPC 1121010 #25 Date 12/15/74 Run DST 25 Office CASPER

Customer ARCO ET AL Location SORGHUM GULCH

State COLORADO County/~~Parish~~ RIO BLANCO

Well SG No. ~~20~~17 Field TRACT C-b

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 1100	12/15/74 2.			
Depart: Well/Dock	1. 0430	12/16/74 2.			17½ Hrs.
Gauge Start in Hole	1. 1321	12/15/74 2.			
Gauge Out of Hole	1. 0309	12/16/74 2.			14 Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # 222 Element # 35990 Range 1400 LB Time Mode [illegible]

Btm.Gauge # 194 Element # 35338 Range 2000 LB Time Mode [illegible]

Type Tool Test Depth 1617-1170' Zero Point [illegible]

Packer Depth 1617' Tail Pipe Depth 1670 Top Gauge Depth 1577'

Bottom Hole Temp. [illegible] Atmos. Temp. 72 Bottom Gauge Depth [illegible]

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	1503	12/15/74	Initial Hydrostatic Mud	450
Packer Set	1510	"	Initial Draw Down	14
Initial Open	1513	"	Initial Build-Up	476
Initial Shut-In	1515	"	Final Flow	27-511
ART. CYCLE HYDRAULIC-1545				
Start Flow	1548	"	Final Build-Up	
Final Shut-In	0245	12/16	Final Hydrostatic Mud	[illegible]
Packer Unseated	0255	12/16	Mud Weight	

TAG BOTTOM & CAME OFF 1452 HRS

TIME OF SURFACE NULLS

Top Gauge [illegible] [illegible] 1246 Bottom Gauge 1314 1315 [illegible]

Remarks

P-423 II B-1138 Operator

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 222 WITH 1400 LB. ELEMENT

GAUGE DEPTH IS 1578 FT. OUTSIDE DRILL PIPE

ABOVE PACKER

TEST INTERVAL IS SURFACE TO 1578 FT.

PACKER DEPTH IS 1614 FT. TO 1618 FT.

INITIAL HYDROSTATIC IS 464.36 PSI

FINAL HYDROSTATIC IS 472.99 PSI

560 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                                DATE OF JO
SPG-11210-W                                                                  12-15-7

GAUGE/RUN NUMBER                                                          DATE OF RU
222  RUN NO. 23  DST NO. 26                                                   1-14-7

                                        SPERRY-SUN
                        PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                      TIME      DATE              COMMENTS
    TIME      (PSI)                       HR MIN

    0.000     475.807                     15  15 DEC 15,1974   INITIAL SHUTIN
     .017     475.907                     15  16 DEC 15,1974
     .034     475.974                     15  17 DEC 15,1974
     .052     476.007                     15  18 DEC 15,1974
     .069     465.314                     15  19 DEC 15,1974
     .086     467.051                     15  20 DEC 15,1974
     .103     466.082                     15  21 DEC 15,1974
     .121     466.116                     15  22 DEC 15,1974
     .138     466.082                     15  23 DEC 15,1974
     .155     466.116                     15  24 DEC 15,1974
     .172     466.082                     15  25 DEC 15,1974
     .190     466.183                     15  26 DEC 15,1974
     .207     466.149                     15  27 DEC 15,1974
     .224     466.416                     15  28 DEC 15,1974
     .241     466.450                     15  29 DEC 15,1974
     .259     466.450                     15  31 DEC 15,1974
     .276     466.483                     15  32 DEC 15,1974
     .293     466.550                     15  33 DEC 15,1974
     .310     466.550                     15  34 DEC 15,1974
     .328     466.550                     15  35 DEC 15,1974
     .345     466.584                     15  36 DEC 15,1974
     .362     466.617                     15  37 DEC 15,1974
     .379     466.650                     15  38 DEC 15,1974
     .397     466.650                     15  39 DEC 15,1974
     .414     466.717                     15  40 DEC 15,1974
     .431     466.717                     15  41 DEC 15,1974
     .448     466.717                     15  42 DEC 15,1974
     .466     466.784                     15  43 DEC 15,1974
     .483     466.851                     15  44 DEC 15,1974
     .500     466.884                     15  45 DEC 15,1974   END SHUT IN
```

```
                         30 POINTS REPORTED THIS RUN

                                   PAGE  2
```

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
0.000	472.331	15	50	DEC 15,1974	START RECOVERY
.017	476.609	15	51	DEC 15,1974	
.033	476.809	15	52	DEC 15,1974	
.050	477.043	15	53	DEC 15,1974	
.067	477.043	15	54	DEC 15,1974	
.083	476.976	15	55	DEC 15,1974	
.100	477.110	15	56	DEC 15,1974	
.117	477.143	15	57	DEC 15,1974	
.134	477.244	15	58	DEC 15,1974	
.150	477.210	15	59	DEC 15,1974	
.167	477.244	16	00	DEC 15,1974	
.184	477.277	16	01	DEC 15,1974	
.200	477.310	16	02	DEC 15,1974	
.217	477.344	16	03	DEC 15,1974	
.234	477.377	16	04	DEC 15,1974	
.250	477.344	16	05	DEC 15,1974	
.267	477.411	16	06	DEC 15,1974	
.284	477.444	16	07	DEC 15,1974	
.301	477.411	16	08	DEC 15,1974	
.317	477.444	16	09	DEC 15,1974	
.334	477.511	16	10	DEC 15,1974	
.351	477.511	16	11	DEC 15,1974	
.367	477.578	16	12	DEC 15,1974	
.384	477.511	16	13	DEC 15,1974	
.401	477.578	16	14	DEC 15,1974	
.417	477.645	16	15	DEC 15,1974	
.434	477.611	16	16	DEC 15,1974	
.451	477.645	16	17	DEC 15,1974	
.468	477.678	16	18	DEC 15,1974	
.484	477.711	16	19	DEC 15,1974	
.501	477.745	16	20	DEC 15,1974	
.518	477.745	16	21	DEC 15,1974	
.534	477.745	16	22	DEC 15,1974	
.551	477.778	16	23	DEC 15,1974	
.568	477.812	16	24	DEC 15,1974	
.584	477.879	16	25	DEC 15,1974	
.601	477.845	16	26	DEC 15,1974	
.618	477.879	16	27	DEC 15,1974	
.635	477.879	16	28	DEC 15,1974	
.651	477.945	16	29	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO, 23 DST NO, 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.668	477.979	16	30	DEC 15,1974	
.685	477.945	16	31	DEC 15,1974	
.701	477.945	16	32	DEC 15,1974	
.718	477.979	16	33	DEC 15,1974	
.735	478.046	16	34	DEC 15,1974	
.751	478.079	16	35	DEC 15,1974	
.768	478.146	16	36	DEC 15,1974	
.785	478.112	16	37	DEC 15,1974	
.802	478.179	16	38	DEC 15,1974	
.818	478.213	16	39	DEC 15,1974	
.835	478.213	16	40	DEC 15,1974	
.852	478.280	16	41	DEC 15,1974	
.868	478.280	16	42	DEC 15,1974	
.885	478.280	16	43	DEC 15,1974	
.902	478.346	16	44	DEC 15,1974	
.918	478.313	16	45	DEC 15,1974	
.935	478.346	16	46	DEC 15,1974	
.952	478.313	16	47	DEC 15,1974	
.968	478.380	16	48	DEC 15,1974	
.985	478.413	16	49	DEC 15,1974	
1.002	478.447	16	50	DEC 15,1974	
1.019	478.380	16	51	DEC 15,1974	
1.035	478.447	16	52	DEC 15,1974	
1.052	478.513	16	53	DEC 15,1974	
1.069	478.480	16	54	DEC 15,1974	
1.085	478.580	16	55	DEC 15,1974	
1.102	478.580	16	56	DEC 15,1974	
1.119	478.580	16	57	DEC 15,1974	
1.135	478.580	16	58	DEC 15,1974	
1.152	478.580	16	59	DEC 15,1974	
1.169	478.647	17	00	DEC 15,1974	
1.186	478.647	17	01	DEC 15,1974	
1.202	478.647	17	02	DEC 15,1974	
1.219	478.647	17	03	DEC 15,1974	
1.236	478.681	17	04	DEC 15,1974	
1.252	478.781	17	05	DEC 15,1974	
1.269	478.747	17	06	DEC 15,1974	
1.286	478.747	17	07	DEC 15,1974	
1.302	478.781	17	08	DEC 15,1974	
1.319	478.781	17	09	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.336	478.881	17	10	DEC 15,1974	
1.353	478.814	17	11	DEC 15,1974	
1.369	478.848	17	12	DEC 15,1974	
1.386	478.914	17	13	DEC 15,1974	
1.403	478.914	17	14	DEC 15,1974	
1.419	478.948	17	15	DEC 15,1974	
1.436	478.948	17	16	DEC 15,1974	
1.453	478.981	17	17	DEC 15,1974	
1.469	478.981	17	18	DEC 15,1974	
1.486	478.981	17	19	DEC 15,1974	
1.503	479.015	17	20	DEC 15,1974	END RECOVERY
1.520	479.015	17	21	DEC 15,1974	
1.536	476.981	17	22	DEC 15,1974	
1.553	479.048	17	23	DEC 15,1974	
1.570	479.082	17	24	DEC 15,1974	
1.586	479.115	17	25	DEC 15,1974	
1.603	479.115	17	26	DEC 15,1974	
1.620	479.115	17	27	DEC 15,1974	
1.636	479.182	17	28	DEC 15,1974	
1.653	479.182	17	29	DEC 15,1974	
1.670	479.282	17	30	DEC 15,1974	
1.687	479.249	17	31	DEC 15,1974	
1.703	479.282	17	32	DEC 15,1974	
1.720	479.249	17	33	DEC 15,1974	
1.737	479.315	17	34	DEC 15,1974	
1.753	479.282	17	35	DEC 15,1974	
1.770	479.349	17	36	DEC 15,1974	
1.787	479.349	17	37	DEC 15,1974	
1.803	479.349	17	38	DEC 15,1974	
1.820	479.349	17	39	DEC 15,1974	
1.837	479.449	17	40	DEC 15,1974	
1.853	479.449	17	41	DEC 15,1974	
1.870	479.382	17	42	DEC 15,1974	
1.887	479.416	17	43	DEC 15,1974	
1.904	479.516	17	44	DEC 15,1974	
1.920	479.516	17	45	DEC 15,1974	
1.937	479.549	17	46	DEC 15,1974	
1.954	479.549	17	47	DEC 15,1974	
1.970	479.650	17	48	DEC 15,1974	
1.987	479.616	17	49	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.004	479.583	17	50	DEC 15,1974	
2.020	479.583	17	51	DEC 15,1974	
2.037	479.650	17	52	DEC 15,1974	
2.054	479.717	17	53	DEC 15,1974	
2.071	479.683	17	54	DEC 15,1974	
2.087	479.717	17	55	DEC 15,1974	
2.104	479.750	17	56	DEC 15,1974	
2.121	479.750	17	57	DEC 15,1974	
2.137	479.783	17	58	DEC 15,1974	
2.154	479.750	17	59	DEC 15,1974	
2.171	479.850	18	00	DEC 15,1974	
2.187	479.783	18	01	DEC 15,1974	
2.204	479.783	18	02	DEC 15,1974	
2.221	479.850	18	03	DEC 15,1974	
2.238	479.884	18	04	DEC 15,1974	
2.254	479.884	18	05	DEC 15,1974	
2.271	479.850	18	06	DEC 15,1974	
2.288	479.850	18	07	DEC 15,1974	
2.304	479.917	18	08	DEC 15,1974	
2.321	479.950	18	09	DEC 15,1974	
2.338	479.950	18	10	DEC 15,1974	
2.354	479.950	18	11	DEC 15,1974	
2.371	480.051	18	12	DEC 15,1974	
2.388	479.917	18	13	DEC 15,1974	
2.405	480.017	18	14	DEC 15,1974	
2.421	480.051	18	15	DEC 15,1974	
2.438	480.084	18	16	DEC 15,1974	
2.455	480.017	18	17	DEC 15,1974	
2.471	480.017	18	18	DEC 15,1974	
2.488	480.184	18	19	DEC 15,1974	
2.505	480.184	18	20	DEC 15,1974	
2.521	480.118	18	21	DEC 15,1974	
2.538	480.118	18	22	DEC 15,1974	
2.555	480.218	18	23	DEC 15,1974	
2.572	480.218	18	24	DEC 15,1974	
2.588	480.218	18	25	DEC 15,1974	BEGIN JETTING
2.605	480.218	18	26	DEC 15,1974	
2.622	480.285	18	27	DEC 15,1974	
2.638	480.285	18	28	DEC 15,1974	
2.655	480.318	18	29	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.672	480.318	18	30	DEC 15,1974	
2.688	480.285	18	31	DEC 15,1974	
2.705	480.285	18	32	DEC 15,1974	
2.722	480.318	18	33	DEC 15,1974	
2.739	480.318	18	34	DEC 15,1974	
2.755	480.318	18	35	DEC 15,1974	
2.772	480.351	18	36	DEC 15,1974	
2.789	480.418	18	37	DEC 15,1974	
2.805	480.385	18	38	DEC 15,1974	
2.822	480.351	18	39	DEC 15,1974	
2.839	480.452	18	40	DEC 15,1974	
2.855	480.385	18	41	DEC 15,1974	
2.672	480.418	18	42	DEC 15,1974	
2.889	480.485	18	43	DEC 15,1974	
2.905	480.519	18	44	DEC 15,1974	
2.922	480.452	18	45	DEC 15,1974	
2.939	480.552	18	46	DEC 15,1974	
2.956	480.519	18	47	DEC 15,1974	
2.972	480.585	18	48	DEC 15,1974	
2.989	480.585	18	49	DEC 15,1974	
3.006	480.585	18	50	DEC 15,1974	
3.022	480.652	18	51	DEC 15,1974	
3.039	480.585	18	52	DEC 15,1974	
3.056	480.552	18	53	DEC 15,1974	
3.072	480.652	18	54	DEC 15,1974	
3.089	480.686	18	55	DEC 15,1974	
3.106	480.752	18	56	DEC 15,1974	
3.123	480.686	18	57	DEC 15,1974	
3.139	480.686	18	58	DEC 15,1974	
3.156	480.719	18	59	DEC 15,1974	
3.173	480.786	19	00	DEC 15,1974	
3.189	480.752	19	01	DEC 15,1974	
3.206	480.786	19	02	DEC 15,1974	
3.223	480.853	19	03	DEC 15,1974	
3.239	480.786	19	04	DEC 15,1974	
3.256	480.853	19	05	DEC 15,1974	
3.273	480.786	19	06	DEC 15,1974	
3.290	480.853	19	07	DEC 15,1974	
3.306	480.920	19	08	DEC 15,1974	
3.323	480.853	19	09	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.340	480.853	19	10	DEC 15,1974	
3.356	480.920	19	11	DEC 15,1974	
3.373	480.920	19	12	DEC 15,1974	
3.390	480.920	19	13	DEC 15,1974	
3.406	480.953	19	14	DEC 15,1974	
3.423	481.020	19	15	DEC 15,1974	
3.440	480.986	19	16	DEC 15,1974	
3.457	481.020	19	17	DEC 15,1974	
3.473	481.020	19	18	DEC 15,1974	
3.490	481.053	19	19	DEC 15,1974	
3.507	481.053	19	20	DEC 15,1974	
3.523	481.053	19	21	DEC 15,1974	
3.540	481.087	19	22	DEC 15,1974	
3.557	481.120	19	23	DEC 15,1974	
3.573	481.087	19	24	DEC 15,1974	END JETTING
3.590	481.087	19	25	DEC 15,1974	
3.607	481.120	19	26	DEC 15,1974	
3.624	481.187	19	27	DEC 15,1974	
3.640	481.220	19	28	DEC 15,1974	
3.657	481.220	19	29	DEC 15,1974	
3.674	481.220	19	30	DEC 15,1974	
3.690	481.254	19	31	DEC 15,1974	
3.707	481.254	19	32	DEC 15,1974	
3.724	481.187	19	33	DEC 15,1974	
3.740	481.220	19	34	DEC 15,1974	
3.757	481.321	19	35	DEC 15,1974	
3.774	481.354	19	36	DEC 15,1974	
3.790	481.287	19	37	DEC 15,1974	
3.807	481.287	19	38	DEC 15,1974	
3.824	481.321	19	39	DEC 15,1974	
3.841	481.321	19	40	DEC 15,1974	
3.857	481.354	19	41	DEC 15,1974	
3.874	481.354	19	42	DEC 15,1974	
3.891	481.354	19	43	DEC 15,1974	
3.907	481.354	19	44	DEC 15,1974	
3.924	481.354	19	45	DEC 15,1974	
3.941	481.421	19	46	DEC 15,1974	
3.957	481.454	19	47	DEC 15,1974	
3.974	481.421	19	48	DEC 15,1974	
3.991	481.454	19	49	DEC 15,1974	

```
JOB NUMBER                                                              DATE OF JOB
SPG-11210-W                                                                12-15-74

GAUGE/RUN NUMBER                                                        DATE OF RUN
222  RUN NO, 23  DST NO, 26                                                 1-14-75

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT


     DELTA    PRESSURE                    TIME      DATE                COMMENTS
     TIME      (PSI)                     HR MIN

     4,008     481,454                   19   50 DEC 15,1974
     4,024     481,488                   19   51 DEC 15,1974
     4,041     481,521                   19   52 DEC 15,1974
     4,058     481,488                   19   53 DEC 15,1974
     4,074     481,521                   19   54 DEC 15,1974
     4,091     481,554                   19   55 DEC 15,1974
     4,108     481,588                   19   56 DEC 15,1974
     4,124     481,521                   19   57 DEC 15,1974
     4,141     481,554                   19   58 DEC 15,1974
     4,158     481,588                   19   59 DEC 15,1974
     4,175     481,521                   20   00 DEC 15,1974
     4,191     481,521                   20   01 DEC 15,1974
     4,208     481,588                   20   02 DEC 15,1974
     4,225     481,655                   20   03 DEC 15,1974
     4,241     481,655                   20   04 DEC 15,1974
     4,258     481,621                   20   05 DEC 15,1974
     4,275     481,621                   20   06 DEC 15,1974
     4,291     481,688                   20   07 DEC 15,1974
     4,308     481,688                   20   08 DEC 15,1974
     4,325     481,688                   20   09 DEC 15,1974
     4,342     481,688                   20   10 DEC 15,1974
     4,358     481,755                   20   11 DEC 15,1974
     4,375     481,688                   20   12 DEC 15,1974
     4,392     481,655                   20   13 DEC 15,1974
     4,408     481,722                   20   14 DEC 15,1974
     4,425     481,722                   20   16 DEC 15,1974
     4,442     481,788                   20   17 DEC 15,1974
     4,458     481,755                   20   18 DEC 15,1974
     4,475     481,788                   20   19 DEC 15,1974
     4,492     481,855                   20   20 DEC 15,1974
     4,509     481,855                   20   21 DEC 15,1974
     4,525     481,822                   20   22 DEC 15,1974
     4,542     481,855                   20   23 DEC 15,1974
     4,559     481,889                   20   24 DEC 15,1974
     4,575     481,855                   20   25 DEC 15,1974
     4,592     481,889                   20   26 DEC 15,1974
     4,609     481,889                   20   27 DEC 15,1974
     4,625     481,889                   20   28 DEC 15,1974
     4,642     481,922                   20   29 DEC 15,1974
     4,659     481,889                   20   30 DEC 15,1974


                                     PAGE  9
```

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
4.675	481.955	20 31	DEC 15,1974	
4.692	482.022	20 32	DEC 15,1974	
4.709	481.955	20 33	DEC 15,1974	
4.726	481.922	20 34	DEC 15,1974	
4.742	481.955	20 35	DEC 15,1974	
4.759	482.022	20 36	DEC 15,1974	
4.776	482.123	20 37	DEC 15,1974	
4.792	482.056	20 38	DEC 15,1974	
4.809	482.022	20 39	DEC 15,1974	
4.826	482.123	20 40	DEC 15,1974	
4.842	482.123	20 41	DEC 15,1974	
4.859	482.056	20 42	DEC 15,1974	
4.876	482.123	20 43	DEC 15,1974	
4.893	482.189	20 44	DEC 15,1974	
4.909	482.156	20 45	DEC 15,1974	
4.926	482.156	20 46	DEC 15,1974	
4.943	482.156	20 47	DEC 15,1974	
4.959	482.223	20 48	DEC 15,1974	
4.976	482.223	20 49	DEC 15,1974	
4.993	482.223	20 50	DEC 15,1974	
5.009	482.290	20 51	DEC 15,1974	
5.026	482.290	20 52	DEC 15,1974	
5.043	482.256	20 53	DEC 15,1974	
5.060	482.290	20 54	DEC 15,1974	
5.076	482.323	20 55	DEC 15,1974	
5.093	482.356	20 56	DEC 15,1974	
5.110	482.390	20 57	DEC 15,1974	
5.126	482.356	20 58	DEC 15,1974	
5.143	482.423	20 59	DEC 15,1974	
5.160	482.390	21 00	DEC 15,1974	
5.176	482.390	21 01	DEC 15,1974	
5.193	482.390	21 02	DEC 15,1974	
5.210	482.390	21 03	DEC 15,1974	
5.227	482.423	21 04	DEC 15,1974	
5.243	482.457	21 05	DEC 15,1974	
5.260	482.457	21 06	DEC 15,1974	
5.277	482.490	21 07	DEC 15,1974	
5.293	482.490	21 08	DEC 15,1974	
5.310	482.524	21 09	DEC 15,1974	
5.327	482.557	21 10	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.343	482.524	21	11	DEC 15,1974	
5.360	482.590	21	12	DEC 15,1974	
5.377	482.557	21	13	DEC 15,1974	
5.394	482.590	21	14	DEC 15,1974	
5.410	482.624	21	15	DEC 15,1974	
5.427	482.590	21	16	DEC 15,1974	
5.444	482.624	21	17	DEC 15,1974	
5.460	482.624	21	18	DEC 15,1974	
5.477	482.657	21	19	DEC 15,1974	
5.494	482.657	21	20	DEC 15,1974	
5.510	482.657	21	21	DEC 15,1974	
5.527	482.657	21	22	DEC 15,1974	
5.544	482.624	21	23	DEC 15,1974	
5.560	482.691	21	24	DEC 15,1974	
5.577	482.724	21	25	DEC 15,1974	2 G/M DP
5.594	482.691	21	26	DEC 15,1974	
5.611	482.724	21	27	DEC 15,1974	
5.627	482.724	21	28	DEC 15,1974	
5.644	482.757	21	29	DEC 15,1974	
5.661	482.724	21	30	DEC 15,1974	
5.677	482.724	21	31	DEC 15,1974	
5.694	482.757	21	32	DEC 15,1974	
5.711	482.757	21	33	DEC 15,1974	
5.727	482.757	21	34	DEC 15,1974	
5.744	482.791	21	35	DEC 15,1974	
5.761	482.858	21	36	DEC 15,1974	
5.778	482.791	21	37	DEC 15,1974	
5.794	482.791	21	38	DEC 15,1974	
5.811	482.824	21	39	DEC 15,1974	
5.828	482.824	21	40	DEC 15,1974	
5.844	482.891	21	41	DEC 15,1974	
5.861	482.824	21	42	DEC 15,1974	
5.878	482.891	21	43	DEC 15,1974	
5.894	482.891	21	44	DEC 15,1974	
5.911	482.891	21	45	DEC 15,1974	5 G/M DP
5.928	482.891	21	46	DEC 15,1974	
5.945	482.958	21	47	DEC 15,1974	
5.961	482.991	21	48	DEC 15,1974	
5.978	482.991	21	49	DEC 15,1974	
5.995	482.958	21	50	DEC 15,1974	

```
JOB NUMBER                                                          DATE OF JOB
SPG-11210-W                                                            12-15-74

GAUGE/RUN NUMBER                                                    DATE OF RUN
222  RUN NO. 23  DST NO. 26                                             1-14-75

                                SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA    PRESSURE                   TIME     DATE              COMMENTS
      TIME      (PSI)                    HR MIN

      6.011     482.991                  21  51 DEC 15,1974
      6.028     482.991                  21  52 DEC 15,1974
      6.045     482.991                  21  53 DEC 15,1974
      6.061     483.058                  21  54 DEC 15,1974
      6.078     482.991                  21  55 DEC 15,1974
      6.095     483.058                  21  56 DEC 15,1974
      6.112     483.158                  21  57 DEC 15,1974
      6.128     483.092                  21  58 DEC 15,1974
      6.145     483.058                  21  59 DEC 15,1974
      6.162     483.158                  22  00 DEC 15,1974
      6.178     483.158                  22  01 DEC 15,1974
      6.195     483.092                  22  02 DEC 15,1974
      6.212     483.192                  22  03 DEC 15,1974
      6.228     483.225                  22  04 DEC 15,1974
      6.245     483.192                  22  05 DEC 15,1974    11 G/M DP
      6.262     483.192                  22  06 DEC 15,1974
      6.279     483.092                  22  07 DEC 15,1974
      6.295     483.225                  22  08 DEC 15,1974
      6.312     483.259                  22  09 DEC 15,1974
      6.329     483.225                  22  10 DEC 15,1974    5 G/M DP
      6.345     483.259                  22  11 DEC 15,1974
      6.362     483.392                  22  12 DEC 15,1974
      6.379     483.559                  22  13 DEC 15,1974
      6.395     483.827                  22  14 DEC 15,1974
      6.412     484.027                  22  15 DEC 15,1974
      6.429     484.061                  22  16 DEC 15,1974
      6.446     484.094                  22  17 DEC 15,1974
      6.462     483.994                  22  18 DEC 15,1974
      6.479     483.960                  22  19 DEC 15,1974
      6.496     483.960                  22  20 DEC 15,1974
      6.512     483.994                  22  21 DEC 15,1974
      6.529     483.860                  22  22 DEC 15,1974
      6.546     483.860                  22  23 DEC 15,1974
      6.562     483.860                  22  24 DEC 15,1974
      6.579     483.860                  22  25 DEC 15,1974    DECLINE
      6.596     483.894                  22  26 DEC 15,1974
      6.612     483.860                  22  27 DEC 15,1974
      6.629     483.860                  22  28 DEC 15,1974
      6.646     483.894                  22  29 DEC 15,1974
      6.663     483.860                  22  30 DEC 15,1974
```

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.679	483.860	22	31	DEC 15,1974	
6.696	483.727	22	32	DEC 15,1974	
6.713	483.693	22	33	DEC 15,1974	
6.729	483.660	22	34	DEC 15,1974	
6.746	483.626	22	35	DEC 15,1974	
6.763	483.626	22	36	DEC 15,1974	
6.779	483.593	22	37	DEC 15,1974	
6.796	483.693	22	38	DEC 15,1974	
6.813	483.559	22	39	DEC 15,1974	
6.830	483.626	22	40	DEC 15,1974	
6.846	483.626	22	41	DEC 15,1974	
6.863	483.626	22	42	DEC 15,1974	
6.880	483.593	22	43	DEC 15,1974	
6.896	483.593	22	44	DEC 15,1974	
6.913	483.626	22	45	DEC 15,1974	
6.930	483.660	22	46	DEC 15,1974	
6.946	483.559	22	47	DEC 15,1974	
6.963	483.593	22	48	DEC 15,1974	
6.980	483.626	22	49	DEC 15,1974	
6.997	483.660	22	50	DEC 15,1974	
7.013	483.693	22	51	DEC 15,1974	
7.030	483.693	22	52	DEC 15,1974	
7.047	483.727	22	53	DEC 15,1974	
7.063	483.760	22	54	DEC 15,1974	
7.080	483.727	22	55	DEC 15,1974	21 G/M ANNULUS
7.097	483.894	22	56	DEC 15,1974	
7.113	484.462	22	57	DEC 15,1974	
7.130	485.331	22	58	DEC 15,1974	
7.147	485.932	22	59	DEC 15,1974	
7.164	486.467	23	00	DEC 15,1974	
7.180	486.935	23	01	DEC 15,1974	
7.197	487.369	23	02	DEC 15,1974	
7.214	487.570	23	03	DEC 15,1974	
7.230	487.937	23	04	DEC 15,1974	
7.247	488.238	23	05	DEC 15,1974	
7.264	488.372	23	06	DEC 15,1974	
7.280	488.438	23	07	DEC 15,1974	
7.297	488.539	23	08	DEC 15,1974	
7.314	488.806	23	09	DEC 15,1974	
7.331	488.940	23	10	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.347	488.873	23	11	DEC 15,1974	
7.364	488.940	23	12	DEC 15,1974	
7.381	489.140	23	13	DEC 15,1974	
7.397	489.207	23	14	DEC 15,1974	
7.414	489.207	23	15	DEC 15,1974	39 GPM DOWN
7.431	490.009	23	16	DEC 15,1974	ANNULUS
7.447	491.012	23	17	DEC 15,1974	
7.464	491.747	23	18	DEC 15,1974	
7.481	492.482	23	19	DEC 15,1974	
7.497	493.117	23	20	DEC 15,1974	
7.514	493.618	23	21	DEC 15,1974	
7.531	493.919	23	22	DEC 15,1974	
7.548	494.320	23	23	DEC 15,1974	
7.564	494.554	23	24	DEC 15,1974	
7.581	494.855	23	25	DEC 15,1974	
7.598	495.055	23	26	DEC 15,1974	
7.614	495.155	23	27	DEC 15,1974	
7.631	495.389	23	28	DEC 15,1974	
7.648	495.523	23	29	DEC 15,1974	
7.664	495.623	23	30	DEC 15,1974	
7.681	495.757	23	31	DEC 15,1974	
7.698	495.857	23	32	DEC 15,1974	
7.715	495.957	23	33	DEC 15,1974	
7.731	496.091	23	34	DEC 15,1974	
7.748	496.191	23	35	DEC 15,1974	61 G/M ANNULUS
7.765	496.124	23	36	DEC 15,1974	
7.781	497.428	23	37	DEC 15,1974	
7.798	498.397	23	38	DEC 15,1974	
7.815	499.099	23	39	DEC 15,1974	
7.831	500.134	23	40	DEC 15,1974	
7.848	500.803	23	41	DEC 15,1974	
7.865	501.337	23	42	DEC 15,1974	
7.882	501.906	23	43	DEC 15,1974	
7.898	502.407	23	44	DEC 15,1974	
7.915	502.875	23	45	DEC 15,1974	
7.932	503.510	23	46	DEC 15,1974	
7.948	503.777	23	47	DEC 15,1974	
7.965	504.111	23	48	DEC 15,1974	
7.982	504.278	23	49	DEC 15,1974	
7.998	504.679	23	50	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
222 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8,015	504,846	23	51	DEC 15,1974	
8,032	505,047	23	52	DEC 15,1974	
8,049	505,214	23	53	DEC 15,1974	
8,065	505,314	23	54	DEC 15,1974	
8,082	504,111	23	55	DEC 15,1974	DECLINE
8,099	501.037	23	56	DEC 15,1974	
8,115	498,397	23	57	DEC 15,1974	
8,132	496,325	23	58	DEC 15,1974	
8,149	494,420	23	59	DEC 15,1974	
8,165	492,916	00	00	DEC 16,1974	
8,182	490,377	00	01	DEC 16,1974	
8,199	490,611	00	02	DEC 16,1974	
8,216	489,875	00	03	DEC 16,1974	
8,232	489,174	00	04	DEC 16,1974	
8,249	488,472	00	05	DEC 16,1974	
8,266	487,971	00	06	DEC 16,1974	
8,282	487,570	00	07	DEC 16,1974	
8,299	487,202	00	08	DEC 16,1974	
8,316	486,968	00	09	DEC 16,1974	
8,332	486.567	00	10	DEC 16,1974	
8,349	486,433	00	11	DEC 16,1974	
8,366	486.300	00	12	DEC 16,1974	
8,382	486,099	00	13	DEC 16,1974	
8,399	485.932	00	14	DEC 16,1974	
8,416	485,765	00	15	DEC 16,1974	
8,433	485,698	00	16	DEC 16,1974	
8,449	485,565	00	17	DEC 16,1974	
8,466	485,431	00	18	DEC 16,1974	
8,483	485,431	00	19	DEC 16,1974	
8,499	485,364	00	20	DEC 16,1974	
8,516	485,230	00	21	DEC 16,1974	
8,533	485,164	00	22	DEC 16,1974	
8,549	485,164	00	23	DEC 16,1974	
8,566	485,164	00	24	DEC 16,1974	
8,583	485,130	00	25	DEC 16,1974	
8,600	484,996	00	26	DEC 16,1974	
8,616	484,996	00	27	DEC 16,1974	
8,633	485,030	00	28	DEC 16,1974	
8,650	484,996	00	29	DEC 16,1974	
8,666	484,896	00	30	DEC 16,1974	

```
JOB NUMBER                                                      DATE OF JOB
SPG-11210-W                                                        12-15-74

GAUGE/RUN NUMBER                                                DATE OF RUN
222  RUN NO. 23  DST NO. 26                                         1-14-75

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT

  DELTA    PRESSURE                   TIME     DATE              COMMENTS
  TIME      (PSI)                    HR MIN

  8.683     484.930                  00  31 DEC 16,1974
  8.700     484.896                  00  32 DEC 16,1974
  8.716     484.996                  00  33 DEC 16,1974
  8.733     484.996                  00  34 DEC 16,1974
  8.750     484.829                  00  35 DEC 16,1974
  8.767     484.996                  00  36 DEC 16,1974
  8.783     484.896                  00  37 DEC 16,1974
  8.800     484.896                  00  38 DEC 16,1974
  8.817     484.896                  00  39 DEC 16,1974
  8.833     484.896                  00  40 DEC 16,1974   END TEST
```

530 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 194 WITH 2000 LB. ELEMENT

GAUGE DEPTH IS 1640 FT. INSIDE DRILL PIPE

BELOW PACKER

TEST INTERVAL IS 1618 FT. TO 1640 FT.

PACKER DEPTH IS 1614 FT. TO 1618 FT.

INITIAL HYDROSTATIC IS 503.86 PSI

FINAL HYDROSTATIC IS 511.81

570 POINTS REPORTED THIS JOB

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	51.824	15	15	DEC 15,1974	INITIAL SHUTIN
.017	61.899	15	16	DEC 15,1974	
.033	311.727	15	17	DEC 15,1974	
.050	462.453	15	18	DEC 15,1974	
.067	492.943	15	19	DEC 15,1974	
.083	512.184	15	20	DEC 15,1974	
.100	521.247	15	21	DEC 15,1974	
.117	526.453	15	22	DEC 15,1974	
.133	529.892	15	23	DEC 15,1974	
.150	532.309	15	24	DEC 15,1974	
.167	534.168	15	25	DEC 15,1974	
.183	535.237	15	26	DEC 15,1974	
.200	536.538	15	27	DEC 15,1974	
.217	537.561	15	28	DEC 15,1974	
.233	538.351	15	29	DEC 15,1974	
.250	539.048	15	30	DEC 15,1974	
.267	539.699	15	31	DEC 15,1974	
.283	540.164	15	32	DEC 15,1974	
.300	540.675	15	33	DEC 15,1974	
.317	541.047	15	34	DEC 15,1974	
.333	541.419	15	35	DEC 15,1974	
.350	541.790	15	36	DEC 15,1974	
.367	542.023	15	37	DEC 15,1974	
.383	542.302	15	38	DEC 15,1974	
.400	542.581	15	39	DEC 15,1974	
.417	542.813	15	40	DEC 15,1974	
.433	542.999	15	41	DEC 15,1974	
.450	543.185	15	42	DEC 15,1974	
.467	543.464	15	43	DEC 15,1974	
.483	543.650	15	44	DEC 15,1974	
.500	543.835	15	45	DEC 15,1974	END SHUT IN

31 POINTS REPORTED THIS RUN

```
JOB NUMBER                                                      DATE OF JO
SPG-11210-W                                                        12-15-7

GAUGE/RUN NUMBER                                                DATE OF RU
194  RUN NO. 23  DST NO. 26                                          1-14-7

                              SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                  TIME     DATE             COMMENTS
    TIME      (PSI)                   HR MIN

    0.000     87.203                  15  50 DEC 15,1974   START RECOVERY
     .016     99.501                  15  51 DEC 15,1974
     .033    111.231                  15  52 DEC 15,1974
     .049    126.839                  15  53 DEC 15,1974
     .066    140.603                  15  54 DEC 15,1974
     .082    151.434                  15  55 DEC 15,1974
     .099    160.752                  15  56 DEC 15,1974
     .115    170.070                  15  57 DEC 15,1974
     .131    176.408                  15  58 DEC 15,1974
     .148    182.178                  15  59 DEC 15,1974
     .164    187.854                  16  00 DEC 15,1974
     .181    193.293                  16  01 DEC 15,1974
     .197    197.361                  16  02 DEC 15,1974
     .213    202.705                  16  03 DEC 15,1974
     .230    207.908                  16  04 DEC 15,1974
     .246    213.205                  16  05 DEC 15,1974
     .263    218.550                  16  06 DEC 15,1974
     .279    223.800                  16  07 DEC 15,1974
     .296    227.584                  16  08 DEC 15,1974
     .312    232.314                  16  09 DEC 15,1974
     .328    237.044                  16  10 DEC 15,1974
     .345    241.726                  16  11 DEC 15,1974
     .361    246.361                  16  12 DEC 15,1974
     .378    250.949                  16  13 DEC 15,1974
     .394    255.301                  16  14 DEC 15,1974
     .410    258.517                  16  15 DEC 15,1974
     .427    262.916                  16  16 DEC 15,1974
     .443    267.173                  16  17 DEC 15,1974
     .460    271.382                  16  18 DEC 15,1974
     .476    275.639                  16  19 DEC 15,1974
     .493    279.943                  16  20 DEC 15,1974
     .509    284.011                  16  21 DEC 15,1974
     .525    287.936                  16  22 DEC 15,1974
     .542    291.909                  16  23 DEC 15,1974
     .558    295.835                  16  23 DEC 15,1974
     .575    299.619                  16  24 DEC 15,1974
     .591    303.315                  16  25 DEC 15,1974
     .607    307.079                  16  26 DEC 15,1974
     .624    310.612                  16  27 DEC 15,1974
     .640    314.097                  16  28 DEC 15,1974
```

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.657	317.537	16	29	DEC 15,1974	
.673	321.069	16	30	DEC 15,1974	
.690	324.369	16	31	DEC 15,1974	
.706	327.715	16	32	DEC 15,1974	
.722	331.062	16	33	DEC 15,1974	
.739	333.572	16	34	DEC 15,1974	
.755	336.778	16	35	DEC 15,1974	
.772	339.892	16	36	DEC 15,1974	
.788	343.006	16	37	DEC 15,1974	
.805	346.120	16	38	DEC 15,1974	
.821	349.234	16	39	DEC 15,1974	
.837	352.163	16	40	DEC 15,1974	
.854	354.440	16	41	DEC 15,1974	
.870	357.368	16	42	DEC 15,1974	
.887	360.343	16	43	DEC 15,1974	
.903	363.178	16	44	DEC 15,1974	
.919	365.223	16	45	DEC 15,1974	
.936	368.011	16	46	DEC 15,1974	
.952	370.846	16	47	DEC 15,1974	
.969	373.310	16	48	DEC 15,1974	
.985	375.866	16	49	DEC 15,1974	
1.002	378.376	16	50	DEC 15,1974	
1.018	380.839	16	51	DEC 15,1974	
1.034	383.349	16	52	DEC 15,1974	
1.051	385.812	16	53	DEC 15,1974	
1.067	390.599	16	54	DEC 15,1974	
1.084	392.970	16	55	DEC 15,1974	
1.100	395.201	16	56	DEC 15,1974	
1.116	397.524	16	57	DEC 15,1974	
1.133	399.755	16	58	DEC 15,1974	
1.149	401.475	16	59	DEC 15,1974	
1.166	403.660	17	00	DEC 15,1974	
1.182	405.890	17	01	DEC 15,1974	
1.199	407.982	17	02	DEC 15,1974	
1.215	410.166	17	03	DEC 15,1974	
1.231	412.165	17	04	DEC 15,1974	
1.248	414.256	17	05	DEC 15,1974	
1.264	416.255	17	06	DEC 15,1974	
1.281	418.253	17	07	DEC 15,1974	
1.297	420.252	17	08	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
1.314	422.158	17	09	DEC 15,1974	
1.330	424.110	17	10	DEC 15,1974	
1.346	426.062	17	11	DEC 15,1974	
1.363	427.921	17	12	DEC 15,1974	
1.379	429.873	17	13	DEC 15,1974	
1.396	431.732	17	14	DEC 15,1974	
1.412	433.544	17	15	DEC 15,1974	
1.428	435.404	17	16	DEC 15,1974	
1.445	437.123	17	17	DEC 15,1974	
1.461	438.750	17	18	DEC 15,1974	
1.478	440.005	17	19	DEC 15,1974	
1.494	436.984	17	20	DEC 15,1974	END RECOVERY
1.511	443.212	17	21	DEC 15,1974	
1.527	444.699	17	22	DEC 15,1974	
1.543	446.233	17	23	DEC 15,1974	
1.560	447.813	17	24	DEC 15,1974	
1.576	449.300	17	25	DEC 15,1974	
1.593	450.741	17	26	DEC 15,1974	
1.609	452.228	17	27	DEC 15,1974	
1.625	453.669	17	28	DEC 15,1974	
1.642	454.971	17	29	DEC 15,1974	
1.658	456.411	17	29	DEC 15,1974	
1.675	457.666	17	30	DEC 15,1974	
1.691	458.968	17	31	DEC 15,1974	
1.708	460.269	17	32	DEC 15,1974	
1.724	461.617	17	33	DEC 15,1974	
1.740	462.965	17	34	DEC 15,1974	
1.757	463.987	17	35	DEC 15,1974	
1.773	465.289	17	36	DEC 15,1974	
1.790	466.497	17	37	DEC 15,1974	
1.806	467.705	17	38	DEC 15,1974	
1.822	468.914	17	39	DEC 15,1974	
1.839	469.797	17	40	DEC 15,1974	
1.855	470.912	17	41	DEC 15,1974	
1.872	472.074	17	42	DEC 15,1974	
1.888	473.190	17	43	DEC 15,1974	
1.905	474.445	17	44	DEC 15,1974	
1.921	475.514	17	45	DEC 15,1974	
1.937	476.629	17	46	DEC 15,1974	
1.954	477.698	17	47	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.970	478.767	17	48	DEC 15,1974	
1.987	479.790	17	49	DEC 15,1974	
2.003	480.812	17	50	DEC 15,1974	
2.020	481.881	17	51	DEC 15,1974	
2.036	482.811	17	52	DEC 15,1974	
2.052	483.787	17	53	DEC 15,1974	
2.069	484.809	17	54	DEC 15,1974	
2.085	485.785	17	55	DEC 15,1974	
2.102	486.715	17	56	DEC 15,1974	
2.118	487.691	17	57	DEC 15,1974	
2.134	488.667	17	58	DEC 15,1974	
2.151	489.550	17	59	DEC 15,1974	
2.167	490.433	18	00	DEC 15,1974	
2.184	491.362	18	01	DEC 15,1974	
2.200	492.199	18	02	DEC 15,1974	
2.217	493.268	18	03	DEC 15,1974	
2.233	494.105	18	04	DEC 15,1974	
2.249	495.592	18	05	DEC 15,1974	
2.266	496.521	18	06	DEC 15,1974	
2.282	497.776	18	07	DEC 15,1974	
2.299	499.078	18	08	DEC 15,1974	
2.315	500.379	18	09	DEC 15,1974	
2.331	501.634	18	10	DEC 15,1974	
2.348	503.632	18	11	DEC 15,1974	
2.364	503.540	18	12	DEC 15,1974	
2.381	504.190	18	13	DEC 15,1974	
2.397	504.841	18	14	DEC 15,1974	
2.414	505.445	18	15	DEC 15,1974	
2.430	506.607	18	16	DEC 15,1974	
2.446	507.211	18	17	DEC 15,1974	
2.463	507.815	18	18	DEC 15,1974	
2.479	508.420	18	19	DEC 15,1974	
2.496	509.024	18	20	DEC 15,1974	
2.512	509.628	18	21	DEC 15,1974	
2.529	520.736	18	22	DEC 15,1974	
2.545	555.594	18	23	DEC 15,1974	
2.561	508.698	18	24	DEC 15,1974	
2.578	489.689	18	25	DEC 15,1974	START JETTING
2.594	472.586	18	26	DEC 15,1974	
2.611	466.404	18	27	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.627	462.407	18	28	DEC 15,1974	
2.643	458.968	18	29	DEC 15,1974	
2.660	458.549	18	30	DEC 15,1974	
2.676	458.642	18	31	DEC 15,1974	
2.693	458.642	18	32	DEC 15,1974	
2.709	458.503	18	33	DEC 15,1974	
2.726	458.131	18	34	DEC 15,1974	
2.742	457.480	18	35	DEC 15,1974	
2.758	456.923	18	36	DEC 15,1974	
2.775	456.969	18	36	DEC 15,1974	
2.791	457.016	18	37	DEC 15,1974	
2.808	457.062	18	38	DEC 15,1974	
2.824	457.341	18	39	DEC 15,1974	
2.840	457.573	18	40	DEC 15,1974	
2.857	457.945	18	41	DEC 15,1974	
2.873	458.270	18	42	DEC 15,1974	
2.890	458.596	18	43	DEC 15,1974	
2.906	459.665	18	44	DEC 15,1974	
2.923	458.782	18	45	DEC 15,1974	
2.939	458.410	18	46	DEC 15,1974	
2.955	459.479	18	47	DEC 15,1974	
2.972	460.641	18	48	DEC 15,1974	
2.988	459.386	18	49	DEC 15,1974	
3.005	458.317	18	50	DEC 15,1974	
3.021	457.480	18	51	DEC 15,1974	
3.037	457.062	18	52	DEC 15,1974	
3.054	457.713	18	53	DEC 15,1974	
3.070	457.899	18	54	DEC 15,1974	
3.087	457.759	18	55	DEC 15,1974	
3.103	457.713	18	56	DEC 15,1974	
3.120	457.806	18	57	DEC 15,1974	
3.136	458.085	18	58	DEC 15,1974	
3.152	457.759	18	59	DEC 15,1974	
3.169	457.387	19	00	DEC 15,1974	
3.185	457.202	19	01	DEC 15,1974	
3.202	457.062	19	02	DEC 15,1974	
3.218	457.062	19	03	DEC 15,1974	
3.235	473.840	19	04	DEC 15,1974	
3.251	473.887	19	05	DEC 15,1974	
3.267	457.016	19	06	DEC 15,1974	

JOB NUMBER
8PG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.284	457.016	19	07	DEC 15,1974	
3.300	457.016	19	08	DEC 15,1974	
3.317	456.876	19	09	DEC 15,1974	
3.333	456.969	19	10	DEC 15,1974	
3.349	457.016	19	11	DEC 15,1974	
3.366	455.342	19	12	DEC 15,1974	
3.382	453.716	19	13	DEC 15,1974	
3.399	452.600	19	14	DEC 15,1974	
3.415	450.788	19	15	DEC 15,1974	
3.432	451.206	19	16	DEC 15,1974	
3.448	452.275	19	17	DEC 15,1974	
3.464	452.461	19	18	DEC 15,1974	
3.481	452.786	19	19	DEC 15,1974	
3.497	452.740	19	20	DEC 15,1974	
3.514	452.786	19	21	DEC 15,1974	
3.530	452.879	19	22	DEC 15,1974	
3.546	452.926	19	23	DEC 15,1974	
3.563	453.158	19	24	DEC 15,1974	
3.579	453.019	19	25	DEC 15,1974	END JETTING
3.596	449.114	19	26	DEC 15,1974	
3.612	433.405	19	27	DEC 15,1974	
3.629	432.383	19	28	DEC 15,1974	
3.645	436.473	19	29	DEC 15,1974	
3.661	438.750	19	30	DEC 15,1974	
3.678	441.492	19	31	DEC 15,1974	
3.694	443.862	19	32	DEC 15,1974	
3.711	445.954	19	33	DEC 15,1974	
3.727	447.860	19	34	DEC 15,1974	
3.743	449.905	19	35	DEC 15,1974	
3.760	451.671	19	36	DEC 15,1974	
3.776	453.483	19	37	DEC 15,1974	
3.793	454.738	19	38	DEC 15,1974	
3.809	456.411	19	39	DEC 15,1974	
3.826	457.992	19	40	DEC 15,1974	
3.842	459.711	19	41	DEC 15,1974	
3.858	461.338	19	42	DEC 15,1974	
3.875	462.407	19	42	DEC 15,1974	
3.891	463.941	19	43	DEC 15,1974	
3.908	464.963	19	44	DEC 15,1974	
3.924	465.986	19	45	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.941	467.519	19	46	DEC 15,1974	
3.957	468.914	19	47	DEC 15,1974	
3.973	470.355	19	48	DEC 15,1974	
3.990	471.702	19	49	DEC 15,1974	
4.006	473.097	19	50	DEC 15,1974	
4.023	474.538	19	51	DEC 15,1974	
4.039	475.885	19	52	DEC 15,1974	
4.055	477.094	19	53	DEC 15,1974	
4.072	478.395	19	54	DEC 15,1974	
4.088	479.418	19	55	DEC 15,1974	
4.105	480.022	19	56	DEC 15,1974	
4.121	480.719	19	57	DEC 15,1974	
4.138	481.695	19	58	DEC 15,1974	
4.154	482.857	19	59	DEC 15,1974	
4.170	483.830	20	00	DEC 15,1974	
4.187	484.995	20	01	DEC 15,1974	
4.203	486.018	20	02	DEC 15,1974	
4.220	487.133	20	03	DEC 15,1974	
4.236	488.202	20	04	DEC 15,1974	
4.252	489.224	20	05	DEC 15,1974	
4.269	490.200	20	06	DEC 15,1974	
4.285	491.177	20	07	DEC 15,1974	
4.302	492.106	20	08	DEC 15,1974	
4.318	493.036	20	09	DEC 15,1974	
4.335	493.965	20	10	DEC 15,1974	
4.351	494.941	20	11	DEC 15,1974	
4.367	495.824	20	12	DEC 15,1974	
4.384	497.451	20	13	DEC 15,1974	
4.400	498.381	20	14	DEC 15,1974	
4.417	499.171	20	15	DEC 15,1974	
4.433	500.007	20	16	DEC 15,1974	
4.450	500.797	20	17	DEC 15,1974	
4.466	501.634	20	18	DEC 15,1974	
4.482	502.331	20	19	DEC 15,1974	
4.499	503.028	20	20	DEC 15,1974	
4.515	503.772	20	21	DEC 15,1974	
4.532	504.423	20	22	DEC 15,1974	
4.548	505.166	20	23	DEC 15,1974	
4.564	505.817	20	24	DEC 15,1974	
4.581	506.421	20	25	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.597	507.211	20	26	DEC 15,1974	
4.614	507.815	20	27	DEC 15,1974	
4.630	508.280	20	28	DEC 15,1974	
4.647	509.070	20	29	DEC 15,1974	
4.663	509.535	20	30	DEC 15,1974	
4.679	510.000	20	31	DEC 15,1974	
4.696	510.558	20	32	DEC 15,1974	
4.712	511.162	20	33	DEC 15,1974	
4.729	511.766	20	34	DEC 15,1974	
4.745	512.324	20	35	DEC 15,1974	
4.761	512.881	20	36	DEC 15,1974	
4.778	513.439	20	37	DEC 15,1974	
4.794	514.043	20	38	DEC 15,1974	
4.811	514.555	20	39	DEC 15,1974	
4.827	515.066	20	40	DEC 15,1974	
4.844	515.624	20	41	DEC 15,1974	
4.860	516.088	20	42	DEC 15,1974	
4.876	516.693	20	43	DEC 15,1974	
4.893	517.157	20	44	DEC 15,1974	
4.909	517.576	20	45	DEC 15,1974	
4.926	518.087	20	46	DEC 15,1974	
4.942	518.505	20	47	DEC 15,1974	
4.958	518.924	20	48	DEC 15,1974	
4.975	519.435	20	48	DEC 15,1974	
4.991	519.853	20	49	DEC 15,1974	
5.008	520.225	20	50	DEC 15,1974	
5.024	520.597	20	51	DEC 15,1974	
5.041	520.969	20	52	DEC 15,1974	
5.057	521.340	20	53	DEC 15,1974	
5.073	521.759	20	54	DEC 15,1974	
5.090	522.084	20	55	DEC 15,1974	
5.106	522.456	20	56	DEC 15,1974	
5.123	522.828	20	57	DEC 15,1974	
5.139	523.199	20	58	DEC 15,1974	
5.156	523.571	20	59	DEC 15,1974	
5.172	523.943	21	00	DEC 15,1974	
5.188	524.315	21	01	DEC 15,1974	
5.205	524.640	21	02	DEC 15,1974	
5.221	524.966	21	03	DEC 15,1974	
5.238	525.384	21	04	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
5.254	525.663	21	05	DEC 15,1974	
5.270	525.988	21	06	DEC 15,1974	
5.287	526.313	21	07	DEC 15,1974	
5.303	526.546	21	08	DEC 15,1974	
5.320	526.871	21	09	DEC 15,1974	
5.336	527.150	21	10	DEC 15,1974	
5.353	527.429	21	11	DEC 15,1974	
5.369	527.801	21	12	DEC 15,1974	
5.385	528.033	21	13	DEC 15,1974	
5.402	528.312	21	14	DEC 15,1974	
5.418	528.591	21	15	DEC 15,1974	
5.435	528.823	21	16	DEC 15,1974	
5.451	529.149	21	17	DEC 15,1974	
5.467	529.381	21	18	DEC 15,1974	
5.484	529.613	21	19	DEC 15,1974	
5.500	529.892	21	20	DEC 15,1974	
5.517	530.171	21	21	DEC 15,1974	
5.533	530.311	21	22	DEC 15,1974	
5.550	530.589	21	23	DEC 15,1974	
5.566	530.775	21	24	DEC 15,1974	
5.582	531.054	21	25	DEC 15,1974	2 G/M DP
5.599	531.287	21	26	DEC 15,1974	
5.615	531.519	21	27	DEC 15,1974	
5.632	533.703	21	28	DEC 15,1974	
5.648	536.399	21	29	DEC 15,1974	
5.665	539.048	21	30	DEC 15,1974	
5.681	541.790	21	31	DEC 15,1974	
5.697	544.393	21	32	DEC 15,1974	
5.714	546.949	21	33	DEC 15,1974	
5.730	549.366	21	34	DEC 15,1974	
5.747	551.830	21	35	DEC 15,1974	
5.763	554.246	21	36	DEC 15,1974	
5.779	556.570	21	37	DEC 15,1974	
5.796	558.894	21	38	DEC 15,1974	
5.812	561.125	21	39	DEC 15,1974	
5.829	563.495	21	40	DEC 15,1974	
5.845	565.587	21	41	DEC 15,1974	
5.862	567.818	21	42	DEC 15,1974	
5.878	569.909	21	43	DEC 15,1974	
5.894	571.908	21	44	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
5.911	573.906	21 45	DEC 15,1974	5 G/M DP
5.927	577.067	21 46	DEC 15,1974	
5.944	582.923	21 47	DEC 15,1974	
5.960	588.314	21 48	DEC 15,1974	
5.976	594.217	21 49	DEC 15,1974	
5.993	599.608	21 50	DEC 15,1974	
6.009	605.093	21 51	DEC 15,1974	
6.026	610.019	21 52	DEC 15,1974	
6.042	614.016	21 53	DEC 15,1974	
6.059	618.199	21 54	DEC 15,1974	
6.075	622.243	21 54	DEC 15,1974	
6.091	626.519	21 55	DEC 15,1974	
6.108	630.609	21 56	DEC 15,1974	
6.124	634.606	21 57	DEC 15,1974	
6.141	638.556	21 58	DEC 15,1974	
6.157	642.228	21 59	DEC 15,1974	
6.173	646.365	22 00	DEC 15,1974	
6.190	650.362	22 01	DEC 15,1974	
6.206	654.080	22 02	DEC 15,1974	
6.223	657.659	22 03	DEC 15,1974	
6.239	662.539	22 04	DEC 15,1974	
6.256	674.669	22 05	DEC 15,1974	11 G/M DP
6.272	688.008	22 06	DEC 15,1974	
6.288	700.604	22 07	DEC 15,1974	
6.305	708.180	22 08	DEC 15,1974	
6.321	720.729	22 09	DEC 15,1974	
6.338	721.472	22 10	DEC 15,1974	5 G/M DP
6.354	721.937	22 11	DEC 15,1974	
6.371	722.355	22 12	DEC 15,1974	
6.387	722.634	22 13	DEC 15,1974	
6.403	722.727	22 14	DEC 15,1974	
6.420	723.052	22 15	DEC 15,1974	
6.436	723.285	22 16	DEC 15,1974	
6.453	723.517	22 17	DEC 15,1974	
6.469	723.703	22 18	DEC 15,1974	
6.485	723.982	22 19	DEC 15,1974	
6.502	724.121	22 20	DEC 15,1974	
6.518	724.261	22 21	DEC 15,1974	
6.535	724.447	22 22	DEC 15,1974	
6.551	724.586	22 23	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
6.568	724.168	22 24	DEC 15,1974	
6.584	720.031	22 25	DEC 15,1974	DECLINE
6.600	716.034	22 26	DEC 15,1974	
6.617	712.037	22 27	DEC 15,1974	
6.633	709.202	22 28	DEC 15,1974	
6.650	706.321	22 29	DEC 15,1974	
6.666	703.532	22 30	DEC 15,1974	
6.682	700.790	22 31	DEC 15,1974	
6.699	698.141	22 32	DEC 15,1974	
6.715	695.677	22 33	DEC 15,1974	
6.732	693.121	22 34	DEC 15,1974	
6.748	690.751	22 35	DEC 15,1974	
6.765	688.380	22 36	DEC 15,1974	
6.781	685.963	22 37	DEC 15,1974	
6.797	683.593	22 38	DEC 15,1974	
6.814	681.409	22 39	DEC 15,1974	
6.830	679.131	22 40	DEC 15,1974	
6.847	676.947	22 41	DEC 15,1974	
6.863	674.716	22 42	DEC 15,1974	
6.879	672.485	22 43	DEC 15,1974	
6.896	670.393	22 44	DEC 15,1974	
6.912	668.302	22 45	DEC 15,1974	
6.929	666.211	22 46	DEC 15,1974	
6.945	664.212	22 47	DEC 15,1974	
6.962	662.260	22 48	DEC 15,1974	
6.978	660.215	22 49	DEC 15,1974	
6.994	658.309	22 50	DEC 15,1974	
7.011	656.497	22 51	DEC 15,1974	
7.027	654.545	22 52	DEC 15,1974	
7.044	652.732	22 53	DEC 15,1974	
7.060	651.105	22 54	DEC 15,1974	
7.077	649.386	22 55	DEC 15,1974	21 G/M ANNULUS
7.093	647.620	22 56	DEC 15,1974	
7.109	645.946	22 57	DEC 15,1974	
7.126	644.273	22 58	DEC 15,1974	
7.142	642.553	22 59	DEC 15,1974	
7.159	641.020	23 00	DEC 15,1974	
7.175	639.440	23 01	DEC 15,1974	
7.191	637.952	23 01	DEC 15,1974	
7.208	636.465	23 02	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO, 23 DST NO, 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7,224	635,024	23	03	DEC 15,1974	
7,241	633,444	23	04	DEC 15,1974	
7,257	632,003	23	05	DEC 15,1974	
7,274	630,609	23	06	DEC 15,1974	
7,290	629,214	23	07	DEC 15,1974	
7,306	627,867	23	08	DEC 15,1974	
7,323	626,519	23	09	DEC 15,1974	
7,339	625,171	23	10	DEC 15,1974	
7,356	624,102	23	11	DEC 15,1974	
7,372	622,615	23	12	DEC 15,1974	
7,388	621,220	23	13	DEC 15,1974	
7,405	619,919	23	14	DEC 15,1974	
7,421	618,757	23	15	DEC 15,1974	39 G/M ANNULUS
7,438	617,502	23	16	DEC 15,1974	
7.454	616,294	23	17	DEC 15,1974	
7.471	615,178	23	18	DEC 15,1974	
7,487	614,342	23	19	DEC 15,1974	
7.503	613.273	23	20	DEC 15,1974	
7,520	612.157	23	21	DEC 15,1974	
7,536	611.088	23	22	DEC 15,1974	
7,553	610,066	23	23	DEC 15,1974	
7,569	608,997	23	24	DEC 15,1974	
7,586	607,974	23	25	DEC 15,1974	
7,602	606,905	23	26	DEC 15,1974	
7,618	605,976	23	27	DEC 15,1974	
7,635	605,000	23	28	DEC 15,1974	
7,651	603,931	23	29	DEC 15,1974	
7,668	602.955	23	30	DEC 15,1974	
7,684	602,025	23	31	DEC 15,1974	
7,700	601,142	23	32	DEC 15,1974	
7,717	600,306	23	33	DEC 15,1974	
7,733	599,422	23	34	DEC 15,1974	
7,750	598,586	23	35	DEC 15,1974	61 G/M ANNULUS
7,766	597,749	23	36	DEC 15,1974	
7,783	596,913	23	37	DEC 15,1974	
7,799	596,123	23	38	DEC 15,1974	
7,815	595.286	23	39	DEC 15,1974	
7,832	594,542	23	40	DEC 15,1974	
7,848	593,659	23	41	DEC 15,1974	
7,865	592,916	23	42	DEC 15,1974	

JOB NUMBER
SPG-11210-W

DATE OF JO
12-15-7

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RU
1-14-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7,881	592,172	23	43	DEC 15,1974	
7,897	591,382	23	44	DEC 15,1974	
7,914	590,731	23	45	DEC 15,1974	
7,930	590,034	23	46	DEC 15,1974	
7,947	589,337	23	47	DEC 15,1974	
7,963	588,733	23	48	DEC 15,1974	
7,980	588,035	23	49	DEC 15,1974	
7,996	587,431	23	50	DEC 15,1974	
8,012	586,827	23	51	DEC 15,1974	
8,029	586,176	23	52	DEC 15,1974	
8,045	585,572	23	53	DEC 15,1974	
8,062	585,061	23	54	DEC 15,1974	
8,078	584,410	23	55	DEC 15,1974	DECLINE
8,094	583,853	23	56	DEC 15,1974	
8,111	583,295	23	57	DEC 15,1974	
8,127	582,737	23	58	DEC 15,1974	
8,144	582,086	23	59	DEC 15,1974	
8.160	581,622	00	00	DEC 16,1974	
8,177	581,017	00	01	DEC 16,1974	
8,193	580,506	00	02	DEC 16,1974	
8,209	579,948	00	03	DEC 16,1974	
8,226	579,530	00	04	DEC 16,1974	
8,242	578,972	00	05	DEC 16,1974	
8,259	578.508	00	06	DEC 16,1974	
8.275	578.043	00	07	DEC 16,1974	
8,292	577,578	00	07	DEC 16,1974	
8,308	577,160	00	08	DEC 16,1974	
8,324	576.695	00	09	DEC 16,1974	
8,341	576,230	00	10	DEC 16,1974	
8,357	575,812	00	11	DEC 16,1974	
8,374	575,394	00	12	DEC 16,1974	
8,390	574,975	00	13	DEC 16,1974	
8,406	574,511	00	14	DEC 16,1974	
8,423	574,139	00	15	DEC 16,1974	
8,439	573,767	00	16	DEC 16,1974	
8,456	573,395	00	17	DEC 16,1974	
8,472	572,977	00	18	DEC 16,1974	
8,489	572,466	00	19	DEC 16,1974	
8,505	572.187	00	20	DEC 16,1974	
8,521	571,815	00	21	DEC 16,1974	

JOB NUMBER
SPG-11210-W

DATE OF JOB
12-15-74

GAUGE/RUN NUMBER
194 RUN NO. 23 DST NO. 26

DATE OF RUN
1-14-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.538	571.443	00	22	DEC 16,1974	
8.554	571.118	00	23	DEC 16,1974	
8.571	570.839	00	24	DEC 16,1974	
8.587	570.467	00	25	DEC 16,1974	
8.603	570.095	00	26	DEC 16,1974	
8.620	569.816	00	27	DEC 16,1974	
8.636	569.491	00	28	DEC 16,1974	
8.653	569.119	00	29	DEC 16,1974	
8.669	568.887	00	30	DEC 16,1974	
8.686	568.561	00	31	DEC 16,1974	
8.702	568.190	00	32	DEC 16,1974	
8.718	567.957	00	33	DEC 16,1974	
8.735	567.771	00	34	DEC 16,1974	
8.751	567.492	00	35	DEC 16,1974	
8.768	567.167	00	36	DEC 16,1974	
8.784	566.842	00	37	DEC 16,1974	
8.801	566.563	00	38	DEC 16,1974	
8.817	566.331	00	39	DEC 16,1974	
8.833	566.052	00	40	DEC 16,1974	END FLOW

539 POINTS REPORTED THIS RUN

COMPANY ATLANTIC-RICHFIELD COMPANY **WELL** FEDERAL S. G. #17 **TEST NO.** 26 **COUNTY** RIO BLANCO **STATE** COLORADO

JOHNSTON

Schlumberger

technical report

RECEIVED
JAN 2 1975
A. L. ROGERS

II B-1171

F.R. #09110 C

PAGE 1

JOHNSTON
...found a better way

SURFACE INFORMATION

cription (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	0320	-	-
CLOSED FOR INITIAL SHUT-IN	0322	-	-
FINISHED SHUT-IN	0352	-	-
RE-OPENED TOOL	0355	-	-
INJECTED WATER AT 2 GAL/MIN	0848	-	-
INCREASED INJECTION TO			
5 GAL/MIN.	0906	-	-
INCREASED INJECTION TO			
11 GAL/MIN.	0926	-	-
INCREASED INJECTION TO			
21 GAL/MIN.	0946	-	-
DECREASED INJECTION TO			
14 GAL/MIN.	0948	-	-
STOPPED INJECTION	1006	-	-
CLOSED FOR FINAL SHUT-IN	1217	-	-
PULLED PACKER LOOSE	1240	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER - FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036' Ft.
Net Productive Interval 52 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1720 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1336' I.D. -
Packer Depth(s) 1664' & 1668' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	____ @ ____ °F.	______ ppm
Recovery Mud	____ @ ____ °F.	
Recovery Mud Filtrate	____ @ ____ °F.	______ ppm
Mud Pit Sample	____ @ ____ °F.	
Mud Pit Sample Filtrate	____ @ ____ °F.	______ ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202

pany ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S. G. #17 Location 436' FWL & 181' FSL SEC. 16-3S-96W
Test Interval 1668' TO 1720' Test # 26 Date 12-17-74
County RIO BLANCO State COLORADO II B-1172
Technician TAYLOR (VERNAL) Test Approved By MR. S. W. BERKHEISER, JR.
Field Report No. 09110 C
No. Reports Requested 14 (13x)

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.		4633 N		
Capacity (P.S.I.G.)		2650		
Instrument Depth		1643'		
Instrument Opening		INSIDE		
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.		-		
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003483 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt
	517.8		30	537.5		61	456.2	
2	533.6		31	537.5		62	460.1	
3 0	27.5		32	537.5		63	465.4	
1	81.2		33	537.5		64	469.3	
2	127.1		5 34	537.5		65	473.3	
4 3	271.3		35	540.1		66	477.2	
4	342.1		6 36	540.1		67	481.1	
5	509.9		7 36	149.4		68	483.7	
6	516.5		37	188.7		69	487.7	
7	519.2		38	211.0		70	490.3	
8	523.1		39	230.7		71	492.9	
9	525.7		40	250.4		72	495.5	
10	527.0		41	264.8		73	498.2	
11	529.6		42	281.8		74	500.8	
12	529.6		43	297.6		75	503.4	
13	530.9		44	313.2		76	504.7	
14	530.9		45	325.1		77	507.4	
15	532.3		46	339.5		78	508.7	
16	533.6		47	348.7		79	511.3	
17	533.6		48	360.5		80	512.6	
18	534.9		49	370.0		81	513.9	
19	534.9		50	381.5		82	516.5	
20	534.9		51	389.3		83	516.5	
21	536.2		52	398.5		84	517.8	
22	536.2		53	406.4		85	519.2	
23	536.2		54	414.3		86	520.5	
24	536.2		55	419.5		87	521.7	
25	536.2		56	428.7		88	523.1	
26	537.5		57	433.9		89	523.1	
27	537.5		58	440.5		90	524.4	
28	537.5		59	445.7		95	528.3	
29	537.5		60	449.7		100	531.0	

II B-1173

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.	4633 N			
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003483 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
105	533.6		11 255	482.4		287	533.6	
110	536.2		12 256	482.4		288	533.6	
115	537.5		257	447.0		289	533.6	
120	537.5		258	462.8		290	534.9	
125	538.8		259	470.6		295	537.5	
130	540.1		260	475.9		300	540.1	
135	541.4		261	481.1		305	542.8	
140	541.4		262	485.1		310	544.1	
145	542.8		263	490.3		315	545.4	
150	542.8		264	492.9		320	545.4	
155	544.1		265	496.9		325	546.7	
160	544.1		266	500.8		13 330	546.7	
165	544.1		267	502.1		332	555.9	
170	545.4		268	506.0		334	562.4	
175	546.7		269	508.7		336	568.7	
180	548.0		270	511.3		338	571.6	
185	548.0		271	512.6		340	575.5	
190	548.0		272	513.9		342	578.2	
8 194	548.0		273	516.5		344	580.8	
9 195	588.7		274	517.8		346	583.4	
10 197	487.7		275	519.2		348	586.1	
200	485.1		276	521.8		350	588.6	
205	483.7		277	523.1		352	589.9	
210	483.7		278	524.4		354	592.6	
215	483.7		279	525.7		356	593.9	
220	483.7		280	525.7		358	596.5	
225	483.7		281	527.0		360	597.8	
230	482.4		282	528.3		362	599.1	
235	482.4		283	528.3	II B-1174	364	600.4	
240	482.4		284	531.0		366	600.4	
245	482.4		285	531.0		14 368	601.8	
250	482.4		286	532.3		370	613.6	

PRESSURE DATA

Instrument No.		4633 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003483 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
372	622.7		434	604.4		498	565.0	
374	631.9		436	600.4		500	563.7	
376	640.8		438	597.8		502	563.7	
378	646.3		440	593.9		504	563.7	
380	652.9		442	591.3		506	563.7	
382	659.4		444	587.3		508	563.7	
384	663.4		446	586.0		510	563.7	
386	667.3		448	583.4		512	563.7	
15 387	671.3		450	582.1		514	562.4	
388	677.8		452	579.5		516	562.4	
390	717.1		454	578.2		518	562.4	
392	723.7		456	576.8		520	562.4	
394	726.3		458	575.5		522	562.4	
396	727.6		460	574.2		524	562.4	
398	728.9		462	572.9		526	562.4	
400	731.6		464	571.6		528	562.4	
402	732.9		466	570.3		530	562.4	
404	734.2		468	570.3		532	562.4	
406	734.2		470	568.9		534	562.4	
16 408	734.2		472	568.9		536	562.4	
410	711.9		474	567.7		17 537	562.4	
412	698.8		476	567.7		538	561.1	
414	683.0		478	567.7		540	561.1	
416	669.9		480	566.4		542	561.1	
418	658.1		482	566.4		544	561.1	
420	649.0		484	566.4		546	561.1	
422	641.1		486	566.4		548	561.1	
424	633.2		488	565.0		550	561.1	
426	626.7		490	565.0	II B-1175	552	561.1	
428	620.1		492	565.0		554	561.1	
430	613.4		494	565.0		556	561.1	
432	608.3		496	565.0		558	561.1	

PRESSURE DATA

Instrument No.		4633 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003483 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
560	561.1							
19	546.7							

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)	2800		
Instrument Depth	1670'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	-		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003700 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
	521.9		30	538.8		61	454.2	
2	538.8		31	538.8		62	458.4	
3 0	49.4		32	540.2		63	464.0	
1	98.7		33	540.2		64	466.9	
2	145.3		5 34	540.2		65	471.1	
4 3	153.7		35	541.6		66	476.7	
4	473.9		6 36	541.6		67	479.5	
5	497.9		7 36	160.8		68	482.4	
6	510.6		37	189.0		69	486.6	
7	516.2		38	214.4		70	489.4	
8	521.8		39	234.1		71	492.2	
9	524.7		40	253.9		72	495.1	
10	527.5		41	252.5		73	496.5	
11	528.9		42	282.1		74	499.3	
12	531.7		43	299.0		75	500.7	
13	531.7		44	310.3		76	503.5	
14	533.1		45	322.9		77	506.3	
15	534.6		46	337.1		78	507.8	
16	534.6		47	345.6		79	509.2	
17	535.9		48	355.4		80	512.0	
18	535.9		49	368.1		81	513.4	
19	535.9		50	378.0		82	514.8	
20	535.9		51	385.0		83	516.2	
21	535.9		52	394.9		84	517.6	
22	537.4		53	403.4		85	519.0	
23	538.8		54	409.0		86	520.4	
24	538.8		55	418.9		87	520.4	
25	538.8		56	424.5		88	521.9	
26	538.8		57	431.6		89	521.9	
27	538.8		58	437.2		90	523.3	
28	538.8		59	442.9		95	527.5	
29	538.8		60	450.0		100	530.3	

II B-1177

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003700 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
105	533.1		11 255	479.5		287	527.5	
110	534.6		12 256	442.9		288	528.9	
115	535.9		257	447.1		289	528.9	
120	535.9		258	455.6		290	528.9	
125	537.4		259	464.0		295	531.7	
130	537.4		260	471.1		300	534.6	
135	538.8		261	475.3		305	536.0	
140	540.2		262	479.6		310	537.4	
145	540.2		263	485.2		315	538.8	
150	540.2		264	488.0		320	538.8	
155	540.2		265	492.2		325	538.8	
160	540.2		266	496.5		13 330	538.8	
165	541.6		267	497.0		332	547.3	
170	541.6		268	500.7		334	552.9	
175	543.0		269	503.5		336	558.5	
180	544.4		270	506.3		338	562.8	
185	544.4		271	507.8		340	566.9	
190	544.4		272	509.2		342	569.8	
8 194	544.4		273	512.0		344	572.6	
9 195	583.9		274	513.4		346	575.5	
10 197	483.8		275	514.8		348	578.3	
200	482.4		276	516.2		350	579.7	
205	480.9		277	517.6		352	582.5	
210	480.9		278	519.0		354	583.9	
215	480.9		279	519.0		356	585.3	
220	479.5		280	520.4		358	586.7	
225	479.5		281	521.9		360	588.2	
230	479.5		282	523.3	II B-1178	362	589.6	
235	479.5		283	523.3		364	590.8	
240	479.5		284	524.7		366	592.4	
245	479.5		285	526.1		14 368	592.4	
250	479.5		286	526.1		370	605.1	

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. — 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003700 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
372	614.9		434	595.2		498	551.5	
374	623.4		436	590.9		500	551.5	
376	630.5		438	586.7		502	551.5	
378	637.5		440	583.9		504	551.5	
380	644.6		442	581.1		506	551.5	
382	648.8		444	578.3		508	551.5	
384	653.2		446	575.5		510	550.1	
386	658.7		448	572.6		512	550.1	
15 387	661.5		450	571.2		514	550.1	
388	677.0		452	568.4		516	550.1	
390	708.0		454	567.0		518	550.1	
392	715.1		456	565.6		520	550.1	
394	716.5		458	564.2		522	550.1	
396	719.4		460	562.8		524	550.1	
398	719.4		462	562.8		526	550.1	
400	720.7		464	561.4		528	550.1	
402	722.1		466	559.9		530	550.1	
404	722.1		468	559.9		532	550.1	
406	723.6		470	558.5		534	550.1	
16 408	723.6		472	558.5		536	550.1	
410	702.4		474	557.1		17 537	550.1	
412	688.3		476	557.1		538	548.7	
414	675.6		478	555.7		540	548.7	
416	661.5		480	555.7		542	548.7	
418	650.2		482	555.7		544	548.7	
420	640.3		484	554.3		546	548.7	
422	631.9		486	554.3		548	548.7	
424	624.8		488	552.9		550	548.7	
426	616.4		490	552.9	II B-1179	552	548.7	
428	610.7		492	552.9		554	548.7	
430	605.1		494	552.9		556	548.7	
432	599.4		496	552.9		558	548.7	

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09110 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

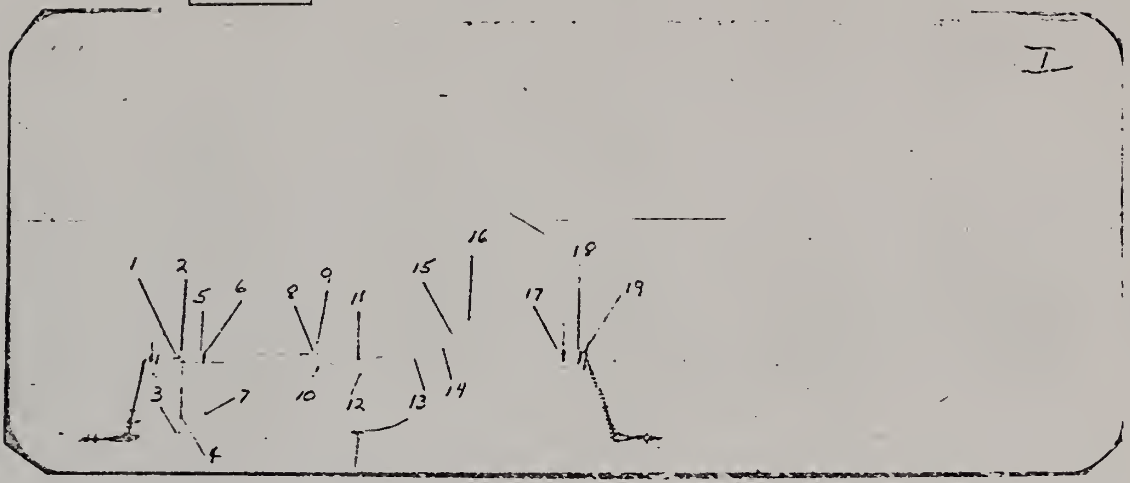
Clock Travel 0.003700 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T + \Delta t}{\Delta t}$
560	548.7							
19	512.0							

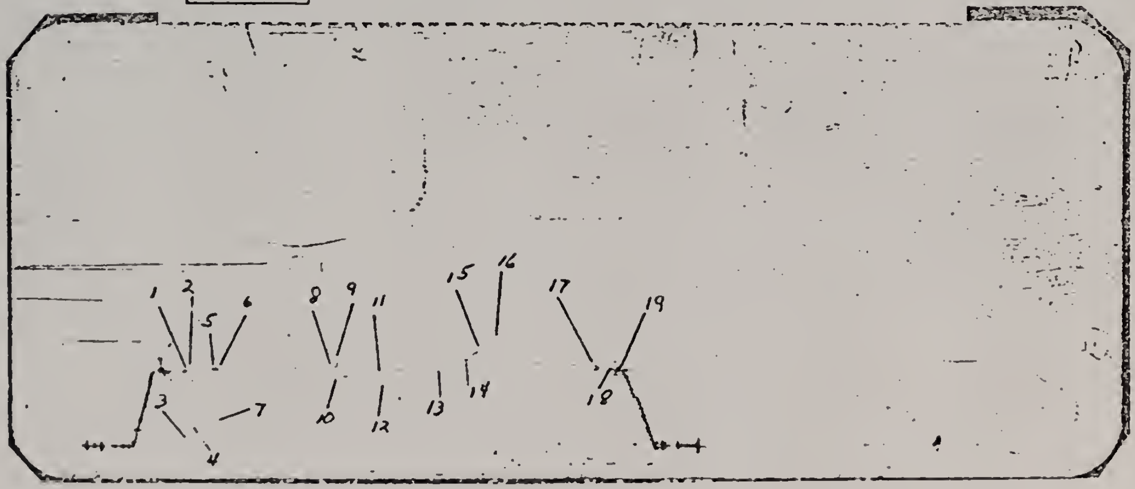
JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09110 C	4633 N
CAPACITY	REPORTS REQUESTED
2650#	14+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09110 C	32342 N
CAPACITY	REPORTS REQUESTED
2800#	14+



PRESSURE GAUGE DRILL STEM TEST SHEET

DST 26

Job No. SPG 11210X Date 12/17/74 Run DST # 26 Office Casper, Wyo.

Customer Arco ET AL Location Sorghum Gulch

State Colorado County/Parish Rio Blanco

Well ES-G No. 17 Field

USE MILITARY TIME FOR ALL TIMES

		Time	Date		Time	Date	Time Charged
Arrive: Well/Dock	1.	0030	12/17/74	2.			
Depart: Well/Dock	1.	1600	12/17/74	2.			15 1/2 Hrs.
Gauge Start in Hole	1.	0030	12/17/74	2.			
Gauge Out of Hole	1.	1438	12/17/74	2.			14 Hrs.

No. Trips ONE Miles 90 Total Mileage 90

Top Gauge # 212 Element # 35992 Range 1400 Time Mode 1 min

Btm. Gauge # 193 Element # 35989 Range 1400 Time Mode 1 min

Type Tool DST Test Depth 1668' to 1720' Zero Point Ground level

Packer Depth 1668' Tail Pipe Depth 1720' Top Gauge Depth 1627'

Bottom Hole Temp. 94° F Atmos. Temp. 21°F Bottom Gauge Depth 1679'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	0240	12/17/74	Initial Hydrostatic ~~Mud~~	504
Packer Set	0318	12/17/74	Initial Draw Down	56
Initial Open	0321	12/17/74	Initial Build-Up	518
Initial Shut-In	0323	12/17/74	Final Flow	154-532
Start Flow	0355	12/17/74	Final Build-Up	532
Final Shut-In	1242	12/17/74	Final Hydrostatic Mud	518
Packer Unseated	1242	12/17/74	Mud Weight	

Ended Test 1226 JH

TIME OF SURFACE NULLS

Top Gauge 0121 0122 0123 Bottom Gauge 0106 0107 0108

Remarks

Mike Elmore
Operator

SP-423

II B-1182

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 212 WITH 1400 LB ELEMENT

GAUGE DEPTH IS 1627 FT, OUTSIDE DRILL PIPE

ABOVE PACKER

TEST INTERVAL IS SURFACE TO 1627 FT.

PACKER DEPTH IS 1668 FT.

INITIAL HYDROSTATIC IS 497.02 PSI

FINAL HYDROSTATIC IS 498.40 PSI

531 POINTS REPORTED THIS JOB

PAGE 1 OF 15 PAGES

```
JOB NUMBER                                                                DATE OF JO
SPG-11210X                                                                  12-17-7

GAUGE/RUN NUMBER                                                          DATE OF RU
212  DST NO. 26                                                             12-17-7

                                     SPERRY-SUN
                      PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA    PRESSURE                           TIME     DATE              COMMENTS
    TIME      (PSI)                            HR MIN

    0.000     497,650                          02   23 DEC 17,1974    INITIAL SHUTIN
     .017     497.524                          02   24 DEC 17,1974
     .033     497.524                          02   25 DEC 17,1974
     .050     497.555                          02   26 DEC 17,1974
     .067     497,555                          02   27 DEC 17,1974
     .083     497,555                          02   28 DEC 17,1974
     .100     497,555                          02   29 DEC 17,1974
     .117     497,587                          02   30 DEC 17,1974
     .133     497.618                          02   31 DEC 17,1974
     .150     497,650                          02   32 DEC 17,1974
     .167     497.650                          02   33 DEC 17,1974
     .183     497.681                          02   34 DEC 17,1974
     .200     497,650                          02   35 DEC 17,1974
     .217     497,681                          02   36 DEC 17,1974
     .233     497.744                          02   37 DEC 17,1974
     .250     497,744                          02   38 DEC 17,1974
     .267     497,775                          02   39 DEC 17,1974
     .283     497,807                          02   40 DEC 17,1974
     .300     497,838                          02   41 DEC 17,1974
     .317     497,838                          02   42 DEC 17,1974
     .333     497.870                          02   43 DEC 17,1974
     .350     497.807                          02   44 DEC 17,1974
     .367     497,870                          02   45 DEC 17,1974
     .383     497,870                          02   46 DEC 17,1974
     .400     497.932                          02   47 DEC 17,1974
     .417     497,964                          02   48 DEC 17,1974
     .433     497.964                          02   49 DEC 17,1974
     .450     497,995                          02   50 DEC 17,1974
     .467     498,027                          02   51 DEC 17,1974    END SHUT IN
```

29 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	498.089	04	00	DEC 17,1974	START FLOW
.017	498.215	04	01	DEC 17,1974	
.033	498.404	04	02	DEC 17,1974	
.050	498.467	04	03	DEC 17,1974	
.067	498.467	04	04	DEC 17,1974	
.083	498.498	04	05	DEC 17,1974	
.100	498.498	04	06	DEC 17,1974	
.117	498.498	04	07	DEC 17,1974	
.133	498.498	04	08	DEC 17,1974	
.150	498.529	04	09	DEC 17,1974	
.167	498.592	04	10	DEC 17,1974	
.183	498.624	04	11	DEC 17,1974	
.200	498.655	04	12	DEC 17,1974	
.217	498.655	04	13	DEC 17,1974	
.233	498.718	04	14	DEC 17,1974	
.250	498.718	04	15	DEC 17,1974	
.267	498.781	04	16	DEC 17,1974	
.283	498.749	04	17	DEC 17,1974	
.300	498.781	04	18	DEC 17,1974	
.317	498.812	04	19	DEC 17,1974	
.333	498.812	04	20	DEC 17,1974	
.350	498.844	04	21	DEC 17,1974	
.367	498.844	04	22	DEC 17,1974	
.383	498.875	04	23	DEC 17,1974	
.400	498.938	04	24	DEC 17,1974	
.417	498.907	04	25	DEC 17,1974	
.433	498.938	04	26	DEC 17,1974	
.450	498.969	04	27	DEC 17,1974	
.467	498.938	04	28	DEC 17,1974	
.483	498.969	04	29	DEC 17,1974	
.500	498.969	04	30	DEC 17,1974	
.517	499.032	04	31	DEC 17,1974	
.533	499.032	04	32	DEC 17,1974	
.550	499.064	04	33	DEC 17,1974	
.567	499.095	04	34	DEC 17,1974	
.583	499.064	04	35	DEC 17,1974	
.600	499.064	04	36	DEC 17,1974	
.617	499.095	04	37	DEC 17,1974	
.633	499.158	04	38	DEC 17,1974	
.650	499.158	04	39	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
.667	499.189	04	40	DEC 17,1974	
.683	499.189	04	41	DEC 17,1974	
.700	499.221	04	42	DEC 17,1974	
.717	499.252	04	43	DEC 17,1974	
.733	499.221	04	44	DEC 17,1974	
.750	499.284	04	45	DEC 17,1974	
.767	499.315	04	46	DEC 17,1974	
.783	499.315	04	47	DEC 17,1974	
.800	499.347	04	48	DEC 17,1974	
.817	499.315	04	49	DEC 17,1974	
.833	499.378	04	50	DEC 17,1974	
.850	499.347	04	51	DEC 17,1974	
.867	499.378	04	52	DEC 17,1974	
.883	499.378	04	53	DEC 17,1974	
.900	499.441	04	54	DEC 17,1974	
.917	499.441	04	55	DEC 17,1974	
.933	499.441	04	56	DEC 17,1974	
.950	499.472	04	57	DEC 17,1974	
.967	499.441	04	58	DEC 17,1974	
.983	499.535	04	59	DEC 17,1974	
1.000	499.535	05	00	DEC 17,1974	
1.017	499.567	05	01	DEC 17,1974	
1.033	499.567	05	02	DEC 17,1974	
1.050	499.567	05	03	DEC 17,1974	
1.067	499.598	05	04	DEC 17,1974	
1.083	499.598	05	05	DEC 17,1974	
1.100	499.629	05	06	DEC 17,1974	
1.117	499.692	05	07	DEC 17,1974	
1.133	499.692	05	08	DEC 17,1974	
1.150	499.692	05	09	DEC 17,1974	
1.167	499.724	05	10	DEC 17,1974	
1.183	499.755	05	11	DEC 17,1974	
1.200	499.787	05	12	DEC 17,1974	
1.217	499.787	05	13	DEC 17,1974	
1.233	499.755	05	14	DEC 17,1974	
1.250	499.787	05	15	DEC 17,1974	
1.267	499.849	05	16	DEC 17,1974	
1.283	499.849	05	17	DEC 17,1974	
1.300	499.881	05	18	DEC 17,1974	
1.317	499.881	05	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JO
12-17-7

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RU
12-17-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.333	499.912	05	20	DEC 17,1974	
1.350	499.849	05	21	DEC 17,1974	
1.367	499.912	05	22	DEC 17,1974	
1.383	499.912	05	23	DEC 17,1974	
1.400	499.944	05	24	DEC 17,1974	
1.417	499.944	05	25	DEC 17,1974	
1.433	500.007	05	26	DEC 17,1974	END FLOW
1.450	500.007	05	27	DEC 17,1974	
1.467	500.038	05	28	DEC 17,1974	
1.483	500.069	05	29	DEC 17,1974	
1.500	500.069	05	30	DEC 17,1974	
1.517	500.069	05	31	DEC 17,1974	
1.533	500.069	05	32	DEC 17,1974	
1.550	500.132	05	33	DEC 17,1974	
1.567	500.164	05	34	DEC 17,1974	
1.583	500.164	05	35	DEC 17,1974	
1.600	500.164	05	36	DEC 17,1974	
1.617	500.195	05	37	DEC 17,1974	
1.633	500.227	05	38	DEC 17,1974	
1.650	500.227	05	39	DEC 17,1974	
1.667	500.227	05	40	DEC 17,1974	
1.683	500.227	05	41	DEC 17,1974	
1.700	500.258	05	42	DEC 17,1974	
1.717	500.258	05	43	DEC 17,1974	
1.733	500.289	05	44	DEC 17,1974	
1.750	500.321	05	45	DEC 17,1974	
1.767	500.352	05	46	DEC 17,1974	
1.783	500.352	05	47	DEC 17,1974	
1.800	500.352	05	48	DEC 17,1974	
1.817	500.352	05	49	DEC 17,1974	
1.833	500.384	05	50	DEC 17,1974	
1.850	500.352	05	51	DEC 17,1974	
1.867	500.415	05	52	DEC 17,1974	
1.883	500.415	05	53	DEC 17,1974	
1.900	500.415	05	54	DEC 17,1974	
1.917	500.447	05	55	DEC 17,1974	
1.933	500.447	05	56	DEC 17,1974	
1.950	500.478	05	57	DEC 17,1974	
1.967	500.478	05	58	DEC 17,1974	
1.983	500.509	05	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JO
12-17-7

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RU
12-17-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.000	500.478	06	00	DEC 17,1974	
2.017	500.509	06	01	DEC 17,1974	
2.033	500.509	06	02	DEC 17,1974	
2.050	500.541	06	03	DEC 17,1974	
2.067	500.541	06	04	DEC 17,1974	
2.083	500.572	06	05	DEC 17,1974	
2.100	500.541	06	06	DEC 17,1974	
2.117	500.604	06	07	DEC 17,1974	
2.133	500.604	06	08	DEC 17,1974	
2.150	500.635	06	09	DEC 17,1974	
2.167	500.667	06	10	DEC 17,1974	
2.183	500.667	06	11	DEC 17,1974	
2.200	500.667	06	12	DEC 17,1974	
2.217	500.667	06	13	DEC 17,1974	
2.233	500.667	06	14	DEC 17,1974	
2.250	500.667	06	15	DEC 17,1974	
2.267	500.667	06	16	DEC 17,1974	
2.283	500.698	06	17	DEC 17,1974	
2.300	500.729	06	18	DEC 17,1974	
2.317	500.761	06	19	DEC 17,1974	
2.333	500.761	06	20	DEC 17,1974	
2.350	500.761	06	21	DEC 17,1974	
2.367	500.824	06	22	DEC 17,1974	
2.383	500.729	06	23	DEC 17,1974	
2.400	500.855	06	24	DEC 17,1974	
2.417	500.855	06	25	DEC 17,1974	
2.433	500.855	06	26	DEC 17,1974	
2.450	500.918	06	27	DEC 17,1974	
2.467	500.918	06	28	DEC 17,1974	
2.483	500.918	06	29	DEC 17,1974	
2.500	500.918	06	30	DEC 17,1974	
2.517	500.918	06	31	DEC 17,1974	
2.533	500.981	06	32	DEC 17,1974	
2.550	500.981	06	33	DEC 17,1974	
2.567	500.981	06	34	DEC 17,1974	
2.583	500.981	06	35	DEC 17,1974	
2.600	501.075	06	36	DEC 17,1974	START JETTING
2.617	501.075	06	37	DEC 17,1974	
2.633	501.075	06	38	DEC 17,1974	
2.650	501.075	06	39	DEC 17,1974	

```
JOB NUMBER                                                          DATE OF JO
SPG-11210X                                                             12-17-7

GAUGE/RUN NUMBER                                                    DATE OF RU
212  DST NO. 26                                                        12-17-7

                                   SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                        TIME     DATE                COMMENTS
    TIME      (PSI)                         HR MIN

    2.667    501.075                        06  40 DEC 17,1974
    2.683    501.106                        06  41 DEC 17,1974
    2.700    501.106                        06  42 DEC 17,1974
    2.717    501.138                        06  43 DEC 17,1974
    2.733    501.138                        06  44 DEC 17,1974
    2.750    501.138                        06  45 DEC 17,1974
    2.767    501.138                        06  46 DEC 17,1974
    2.783    501.138                        06  47 DEC 17,1974
    2.800    501.169                        06  48 DEC 17,1974
    2.817    501.201                        06  49 DEC 17,1974
    2.833    501.201                        06  50 DEC 17,1974
    2.850    501.201                        06  51 DEC 17,1974
    2.867    501.232                        06  52 DEC 17,1974
    2.883    501.232                        06  53 DEC 17,1974
    2.900    501.264                        06  54 DEC 17,1974
    2.917    501.295                        06  55 DEC 17,1974
    2.933    501.295                        06  56 DEC 17,1974
    2.950    501.326                        06  57 DEC 17,1974
    2.967    501.326                        06  58 DEC 17,1974
    2.983    501.358                        06  59 DEC 17,1974
    3.000    501.358                        07  00 DEC 17,1974
    3.017    501.358                        07  01 DEC 17,1974
    3.033    501.358                        07  02 DEC 17,1974
    3.050    501.389                        07  03 DEC 17,1974
    3.067    501.389                        07  04 DEC 17,1974
    3.083    501.421                        07  05 DEC 17,1974
    3.100    501.421                        07  06 DEC 17,1974
    3.117    501.452                        07  07 DEC 17,1974
    3.133    501.421                        07  08 DEC 17,1974
    3.150    501.452                        07  09 DEC 17,1974
    3.167    501.484                        07  10 DEC 17,1974
    3.183    501.484                        07  11 DEC 17,1974
    3.200    501.515                        07  12 DEC 17,1974
    3.217    501.578                        07  13 DEC 17,1974
    3.233    501.578                        07  14 DEC 17,1974
    3.250    501.546                        07  15 DEC 17,1974
    3.267    501.578                        07  16 DEC 17,1974
    3.283    501.609                        07  17 DEC 17,1974
    3.300    501.641                        07  18 DEC 17,1974
    3.317    501.609                        07  19 DEC 17,1974
```

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.333	501.641	07	20	DEC 17,1974	
3.350	501.641	07	21	DEC 17,1974	
3.367	501.641	07	22	DEC 17,1974	
3.383	501.641	07	23	DEC 17,1974	
3.400	501.672	07	24	DEC 17,1974	
3.417	501.704	07	25	DEC 17,1974	
3.433	501.704	07	26	DEC 17,1974	
3.450	501.735	07	27	DEC 17,1974	
3.467	501.704	07	28	DEC 17,1974	
3.483	501.766	07	29	DEC 17,1974	
3.500	501.798	07	30	DEC 17,1974	
3.517	501.766	07	31	DEC 17,1974	
3.533	501.766	07	32	DEC 17,1974	
3.550	501.798	07	33	DEC 17,1974	
3.567	501.829	07	34	DEC 17,1974	
3.583	501.829	07	35	DEC 17,1974	
3.600	501.829	07	36	DEC 17,1974	
3.617	501.861	07	37	DEC 17,1974	
3.633	501.861	07	38	DEC 17,1974	
3.650	501.861	07	39	DEC 17,1974	
3.667	501.861	07	40	DEC 17,1974	END JETTING
3.683	501.924	07	41	DEC 17,1974	
3.700	501.955	07	42	DEC 17,1974	
3.717	501.892	07	43	DEC 17,1974	
3.733	501.924	07	44	DEC 17,1974	
3.750	501.955	07	45	DEC 17,1974	
3.767	501.955	07	46	DEC 17,1974	
3.783	501.986	07	47	DEC 17,1974	
3.800	501.986	07	48	DEC 17,1974	
3.817	502.018	07	49	DEC 17,1974	
3.833	502.018	07	50	DEC 17,1974	
3.850	501.986	07	51	DEC 17,1974	
3.867	501.986	07	52	DEC 17,1974	
3.883	502.018	07	53	DEC 17,1974	
3.900	502.049	07	54	DEC 17,1974	
3.917	502.049	07	55	DEC 17,1974	
3.933	502.049	07	56	DEC 17,1974	
3.950	502.081	07	57	DEC 17,1974	
3.967	502.112	07	58	DEC 17,1974	
3.983	502.112	07	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.000	502.144	08	00	DEC 17,1974	
4.017	502.175	08	01	DEC 17,1974	
4.033	502.206	08	02	DEC 17,1974	
4.050	502.206	08	03	DEC 17,1974	
4.067	502.206	08	04	DEC 17,1974	
4.083	502.238	08	05	DEC 17,1974	
4.100	502.269	08	06	DEC 17,1974	
4.117	502.269	08	07	DEC 17,1974	
4.133	502.269	08	08	DEC 17,1974	
4.150	502.332	08	09	DEC 17,1974	
4.167	502.364	08	10	DEC 17,1974	
4.183	502.489	08	11	DEC 17,1974	
4.200	502.395	08	12	DEC 17,1974	
4.217	502.364	08	13	DEC 17,1974	
4.233	502.364	08	14	DEC 17,1974	
4.250	502.458	08	15	DEC 17,1974	
4.267	502.426	08	16	DEC 17,1974	
4.283	502.458	08	17	DEC 17,1974	
4.300	502.489	08	18	DEC 17,1974	
4.317	502.458	08	19	DEC 17,1974	
4.333	502.458	08	20	DEC 17,1974	
4.350	502.521	08	21	DEC 17,1974	
4.367	502.521	08	22	DEC 17,1974	
4.383	502.552	08	23	DEC 17,1974	
4.400	502.552	08	24	DEC 17,1974	
4.417	502.584	08	25	DEC 17,1974	
4.433	502.584	08	26	DEC 17,1974	
4.450	502.615	08	27	DEC 17,1974	
4.467	502.615	08	28	DEC 17,1974	
4.483	502.584	08	29	DEC 17,1974	
4.500	502.646	08	30	DEC 17,1974	
4.517	502.646	08	31	DEC 17,1974	
4.533	502.678	08	32	DEC 17,1974	
4.550	502.678	08	33	DEC 17,1974	
4.567	502.646	08	34	DEC 17,1974	
4.583	502.678	08	35	DEC 17,1974	
4.600	502.709	08	36	DEC 17,1974	
4.617	502.741	08	37	DEC 17,1974	
4.633	502.678	08	38	DEC 17,1974	
4.650	502.741	08	39	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.667	502.741	08	40	DEC 17,1974	
4.683	502.709	08	41	DEC 17,1974	
4.700	502.772	08	42	DEC 17,1974	
4.717	502.804	08	43	DEC 17,1974	
4.733	502.804	08	44	DEC 17,1974	
4.750	502.804	08	45	DEC 17,1974	
4.767	502.804	08	46	DEC 17,1974	
4.783	502.866	08	47	DEC 17,1974	2 GPM INSIDE
4.800	502.835	08	48	DEC 17,1974	DRILL PIPE
4.817	502.866	08	49	DEC 17,1974	
4.833	502.866	08	50	DEC 17,1974	
4.850	502.835	08	51	DEC 17,1974	
4.867	502.866	08	52	DEC 17,1974	
4.883	502.866	08	53	DEC 17,1974	
4.900	502.866	08	54	DEC 17,1974	
4.917	502.898	08	55	DEC 17,1974	
4.933	502.929	08	56	DEC 17,1974	
4.950	502.898	08	57	DEC 17,1974	
4.967	502.961	08	58	DEC 17,1974	
4.983	502.992	08	59	DEC 17,1974	
5.000	502.961	09	00	DEC 17,1974	
5.017	502.992	09	01	DEC 17,1974	
5.033	502.992	09	02	DEC 17,1974	
5.050	502.992	09	03	DEC 17,1974	
5.067	503.024	09	04	DEC 17,1974	
5.083	502.992	09	05	DEC 17,1974	
5.100	503.055	09	06	DEC 17,1974	
5.117	503.086	09	07	DEC 17,1974	5 GPM INSIDE
5.133	503.086	09	08	DEC 17,1974	DRILL PIPE
5.150	503.086	09	09	DEC 17,1974	
5.167	503.118	09	10	DEC 17,1974	
5.183	503.118	09	11	DEC 17,1974	
5.200	503.149	09	12	DEC 17,1974	
5.217	503.149	09	13	DEC 17,1974	
5.233	503.181	09	14	DEC 17,1974	
5.250	503.181	09	15	DEC 17,1974	
5.267	503.181	09	16	DEC 17,1974	
5.283	503.181	09	17	DEC 17,1974	
5.300	503.181	09	18	DEC 17,1974	
5.317	503.181	09	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO, 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
5,333	503,181	09	20	DEC 17,1974	
5,350	503.212	09	21	DEC 17,1974	
5.367	503.244	09	22	DEC 17,1974	
5,383	503,275	09	23	DEC 17,1974	
5.400	503.244	09	24	DEC 17,1974	
5,417	503,212	09	25	DEC 17,1974	
5,433	503.244	09	26	DEC 17,1974	
5,450	503.275	09	27	DEC 17,1974	11 GPM INSIDE
5.467	503.306	09	28	DEC 17,1974	DRILL PIPE
5,483	503,306	09	29	DEC 17,1974	
5,500	503,338	09	30	DEC 17,1974	
5,517	503.369	09	31	DEC 17,1974	
5.533	503,369	09	32	DEC 17,1974	
5,550	503.369	09	33	DEC 17,1974	
5,567	503.401	09	34	DEC 17,1974	
5.583	503,432	09	35	DEC 17,1974	
5,600	503.432	09	36	DEC 17,1974	
5,617	503.401	09	37	DEC 17,1974	
5,633	503,432	09	38	DEC 17,1974	
5,650	503,464	09	39	DEC 17,1974	
5,667	503,495	09	40	DEC 17,1974	
5,683	503.432	09	41	DEC 17,1974	
5,700	503.495	09	42	DEC 17,1974	
5.717	503.495	09	43	DEC 17,1974	
5,733	503.495	09	44	DEC 17,1974	
5,750	503.495	09	45	DEC 17,1974	
5.767	503.495	09	46	DEC 17,1974	
5,783	503.526	09	47	DEC 17,1974	21 GPM INSIDE
5,800	503,526	09	48	DEC 17,1974	DRILL PIPE
5,817	503.558	09	49	DEC 17,1974	OVERFLOW 14GPM
5,833	503,526	09	50	DEC 17,1974	
5,850	503.526	09	51	DEC 17,1974	
5,867	503.558	09	52	DEC 17,1974	
5.883	503,589	09	53	DEC 17,1974	
5,900	503.621	09	54	DEC 17,1974	
5,917	503.683	09	55	DEC 17,1974	
5.933	503,621	09	56	DEC 17,1974	
5.950	503,621	09	57	DEC 17,1974	
5,967	503,683	09	58	DEC 17,1974	
5,983	503,652	09	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.000	503.652	10	00	DEC 17,1974	
6.017	503.652	10	01	DEC 17,1974	
6.033	503.715	10	02	DEC 17,1974	
6.050	503.715	10	03	DEC 17,1974	
6.067	503.778	10	04	DEC 17,1974	
6.083	503.746	10	05	DEC 17,1974	
6.100	503.746	10	06	DEC 17,1974	
6.117	503.809	10	07	DEC 17,1974	
6.133	503.809	10	08	DEC 17,1974	
6.150	503.809	10	09	DEC 17,1974	
6.167	503.809	10	10	DEC 17,1974	
6.183	503.872	10	11	DEC 17,1974	
6.200	503.841	10	12	DEC 17,1974	
6.217	503.809	10	13	DEC 17,1974	
6.233	503.841	10	14	DEC 17,1974	
6.250	503.903	10	15	DEC 17,1974	
6.267	503.903	10	16	DEC 17,1974	
6.283	503.872	10	17	DEC 17,1974	
6.300	503.935	10	18	DEC 17,1974	
6.317	503.903	10	19	DEC 17,1974	
6.333	503.872	10	20	DEC 17,1974	
6.350	503.903	10	21	DEC 17,1974	
6.367	503.935	10	22	DEC 17,1974	
6.383	503.935	10	23	DEC 17,1974	
6.400	503.935	10	24	DEC 17,1974	
6.417	503.935	10	25	DEC 17,1974	
6.433	503.935	10	26	DEC 17,1974	
6.450	503.935	10	27	DEC 17,1974	
6.467	503.935	10	28	DEC 17,1974	
6.483	503.935	10	29	DEC 17,1974	
6.500	503.935	10	30	DEC 17,1974	
6.517	504.061	10	31	DEC 17,1974	
6.533	504.029	10	32	DEC 17,1974	
6.550	503.998	10	33	DEC 17,1974	
6.567	503.998	10	34	DEC 17,1974	
6.583	504.092	10	35	DEC 17,1974	
6.600	504.061	10	36	DEC 17,1974	
6.617	504.092	10	37	DEC 17,1974	
6.633	504.029	10	38	DEC 17,1974	
6.650	504.092	10	39	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.667	504.061	10	40	DEC 17,1974	
6.683	504.092	10	41	DEC 17,1974	
6.700	504.155	10	42	DEC 17,1974	
6.717	504.186	10	43	DEC 17,1974	
6.733	504.123	10	44	DEC 17,1974	
6.750	504.155	10	45	DEC 17,1974	
6.767	504.123	10	46	DEC 17,1974	
6.783	504.218	10	47	DEC 17,1974	
6.800	504.186	10	48	DEC 17,1974	
6.817	504.218	10	49	DEC 17,1974	
6.833	504.186	10	50	DEC 17,1974	
6.850	504.249	10	51	DEC 17,1974	
6.867	504.218	10	52	DEC 17,1974	
6.883	504.218	10	53	DEC 17,1974	21 GPM DOWN
6.900	504.406	10	54	DEC 17,1974	ANNULUS
6.917	505.632	10	55	DEC 17,1974	
6.933	506.323	10	56	DEC 17,1974	
6.950	506.983	10	57	DEC 17,1974	
6.967	507.486	10	58	DEC 17,1974	
6.983	507.926	10	59	DEC 17,1974	
7.000	508.209	11	00	DEC 17,1974	
7.017	508.523	11	01	DEC 17,1974	
7.033	508.806	11	02	DEC 17,1974	
7.050	509.089	11	03	DEC 17,1974	
7.067	509.215	11	04	DEC 17,1974	
7.083	509.309	11	05	DEC 17,1974	
7.100	509.497	11	06	DEC 17,1974	
7.117	509.623	11	07	DEC 17,1974	
7.133	509.749	11	08	DEC 17,1974	
7.150	509.780	11	09	DEC 17,1974	
7.167	509.937	11	10	DEC 17,1974	
7.183	510.032	11	11	DEC 17,1974	
7.200	510.032	11	12	DEC 17,1974	
7.217	510.095	11	13	DEC 17,1974	39 GPM DOWN
7.233	510.346	11	14	DEC 17,1974	ANNULUS
7.250	511.855	11	15	DEC 17,1974	
7.267	513.049	11	16	DEC 17,1974	
7.283	513.992	11	17	DEC 17,1974	
7.300	514.872	11	18	DEC 17,1974	
7.317	515.689	11	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JO
12-17-7

GAUGE/RUN NUMBER
212 DST NO. 26

DATE OF RU
12-17-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.333	516.286	11	20	DEC 17,1974	
7.350	516.946	11	21	DEC 17,1974	
7.367	517.449	11	22	DEC 17,1974	
7.383	517.888	11	23	DEC 17,1974	
7.400	518.234	11	24	DEC 17,1974	
7.417	518.548	11	25	DEC 17,1974	
7.433	518.863	11	26	DEC 17,1974	
7.450	518.706	11	27	DEC 17,1974	
7.467	518.077	11	28	DEC 17,1974	
7.483	518.077	11	29	DEC 17,1974	
7.500	518.517	11	30	DEC 17,1974	
7.517	518.737	11	31	DEC 17,1974	
7.533	518.957	11	32	DEC 17,1974	
7.550	520.560	11	33	DEC 17,1974	61 GPM DOWN
7.567	521.880	11	34	DEC 17,1974	ANNULUS
7.583	522.917	11	35	DEC 17,1974	
7.600	523.671	11	36	DEC 17,1974	
7.617	524.645	11	37	DEC 17,1974	
7.633	525.462	11	38	DEC 17,1974	
7.650	526.248	11	39	DEC 17,1974	
7.667	526.782	11	40	DEC 17,1974	
7.683	527.379	11	41	DEC 17,1974	
7.700	527.977	11	42	DEC 17,1974	
7.717	528.511	11	43	DEC 17,1974	
7.733	529.076	11	44	DEC 17,1974	
7.750	529.579	11	45	DEC 17,1974	
7.767	529.925	11	46	DEC 17,1974	
7.783	530.145	11	47	DEC 17,1974	
7.800	530.491	11	48	DEC 17,1974	
7.817	530.774	11	49	DEC 17,1974	
7.833	531.025	11	50	DEC 17,1974	
7.850	531.245	11	51	DEC 17,1974	
7.867	531.496	11	52	DEC 17,1974	
7.883	530.082	11	53	DEC 17,1974	START RECOVERY
7.900	526.594	11	54	DEC 17,1974	
7.917	523.420	11	55	DEC 17,1974	
7.933	520.780	11	56	DEC 17,1974	
7.950	518.643	11	57	DEC 17,1974	
7.967	516.789	11	58	DEC 17,1974	
7.983	515.154	11	59	DEC 17,1974	

```
JOB NUMBER                                                       DATE OF JO
SPG-11210X                                                          12-17-7

GAUGE/RUN NUMBER                                                 DATE OF RU
212  DST NO. 26                                                     12-17-7

                                SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE               TIME     DATE              COMMENTS
   TIME      (PSI)                HR MIN

   8.000     513.740              12  00 DEC 17,1974
   8.017     512.546              12  01 DEC 17,1974
   8.033     511.635              12  02 DEC 17,1974
   8.050     510.755              12  03 DEC 17,1974
   8.067     510.095              12  04 DEC 17,1974
   8.083     509.435              12  05 DEC 17,1974
   8.100     508.932              12  06 DEC 17,1974
   8.117     508.555              12  07 DEC 17,1974
   8.133     508.146              12  08 DEC 17,1974
   8.150     507.832              12  09 DEC 17,1974
   8.167     507.518              12  10 DEC 17,1974
   8.183     507.235              12  11 DEC 17,1974
   8.200     507.078              12  12 DEC 17,1974
   8.217     506.763              12  13 DEC 17,1974   END RECOVERY
   8.233     506.512              12  14 DEC 17,1974
   8.250     506.418              12  15 DEC 17,1974
   8.267     506.292              12  16 DEC 17,1974
   8.283     506.072              12  17 DEC 17,1974
   8.300     505.946              12  18 DEC 17,1974
   8.317     505.852              12  19 DEC 17,1974
   8.333     505.789              12  20 DEC 17,1974
   8.350     505.663              12  21 DEC 17,1974   END TEST
```

```
                         502 POINTS REPORTED THIS RUN

                                   PAGE 15
```

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 193 WITH 1400 LB. ELEMENT

GAUGE DEPTH IS 1679 FT. INSIDE DRILL PIPE

BELOW PACKER

TEST INTERVAL 1668 FT. TO 1679 FT.

PACKER DEPTH IS 1668 FT.

INITIAL HYDROSTATIC IS 525.89 PSI

FINAL HYDROSTATIC IS 528.71 PSI

531 POINTS REPORTED THIS JOB

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	91.556	02	23	DEC 17,1974	INITIAL SHUTIN
.017	138.524	02	24	DEC 17,1974	
.033	495.585	02	25	DEC 17,1974	
.050	501.828	02	26	DEC 17,1974	
.067	515.349	02	27	DEC 17,1974	
.083	522.784	02	28	DEC 17,1974	
.100	527.522	02	29	DEC 17,1974	
.117	530.721	02	30	DEC 17,1974	
.133	533.200	02	31	DEC 17,1974	
.150	535.051	02	32	DEC 17,1974	
.167	536.494	02	33	DEC 17,1974	
.183	537.592	02	34	DEC 17,1974	
.200	538.533	02	35	DEC 17,1974	
.217	539.192	02	36	DEC 17,1974	
.233	539.913	02	37	DEC 17,1974	
.250	540.572	02	38	DEC 17,1974	
.267	541.105	02	39	DEC 17,1974	
.283	541.576	02	40	DEC 17,1974	
.300	542.047	02	41	DEC 17,1974	
.317	542.423	02	42	DEC 17,1974	
.333	542.800	02	43	DEC 17,1974	
.350	543.082	02	44	DEC 17,1974	
.367	543.427	02	45	DEC 17,1974	
.383	543.772	02	46	DEC 17,1974	
.400	543.929	02	47	DEC 17,1974	
.417	544.117	02	48	DEC 17,1974	
.433	544.399	02	49	DEC 17,1974	
.450	544.556	02	50	DEC 17,1974	
.467	544.776	02	51	DEC 17,1974	END SHUT IN

29 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	215.500	04	00	DEC 17,1974	START FLOW
.017	232.754	04	01	DEC 17,1974	
.033	251.326	04	02	DEC 17,1974	
.050	268.047	04	03	DEC 17,1974	
.067	284.518	04	04	DEC 17,1974	
.083	300.360	04	05	DEC 17,1974	
.100	311.340	04	06	DEC 17,1974	
.117	324.767	04	07	DEC 17,1974	
.133	340.924	04	08	DEC 17,1974	
.150	357.645	04	09	DEC 17,1974	
.167	373.613	04	10	DEC 17,1974	
.183	384.499	04	11	DEC 17,1974	
.200	397.894	04	12	DEC 17,1974	
.217	410.066	04	13	DEC 17,1974	
.233	416.592	04	14	DEC 17,1974	
.250	424.090	04	15	DEC 17,1974	
.267	431.305	04	16	DEC 17,1974	
.283	438.113	04	17	DEC 17,1974	
.300	444.450	04	18	DEC 17,1974	
.317	450.442	04	19	DEC 17,1974	
.333	454.771	04	20	DEC 17,1974	
.350	459.885	04	21	DEC 17,1974	
.367	464.873	04	22	DEC 17,1974	
.383	468.480	04	23	DEC 17,1974	
.400	472.935	04	24	DEC 17,1974	
.417	477.139	04	25	DEC 17,1974	
.433	481.186	04	26	DEC 17,1974	
.450	483.413	04	27	DEC 17,1974	
.467	484.699	04	28	DEC 17,1974	
.483	488.182	04	29	DEC 17,1974	
.500	491.476	04	30	DEC 17,1974	
.517	494.456	04	31	DEC 17,1974	
.533	497.279	04	32	DEC 17,1974	
.550	499.977	04	33	DEC 17,1974	
.567	502.581	04	34	DEC 17,1974	
.583	505.060	04	35	DEC 17,1974	
.600	507.350	04	36	DEC 17,1974	
.617	509.546	04	37	DEC 17,1974	
.633	511.585	04	38	DEC 17,1974	
.650	513.467	04	39	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.667	515.287	04	40	DEC 17,1974	
.683	517.012	04	41	DEC 17,1974	
.700	518.581	04	42	DEC 17,1974	
.717	520.087	04	43	DEC 17,1974	
.733	521.655	04	44	DEC 17,1974	
.750	522.941	04	45	DEC 17,1974	
.767	524.259	04	46	DEC 17,1974	
.783	525.357	04	47	DEC 17,1974	
.800	526.455	04	48	DEC 17,1974	
.817	527.522	04	49	DEC 17,1974	
.833	528.494	04	50	DEC 17,1974	
.850	529.404	04	51	DEC 17,1974	
.867	530.063	04	52	DEC 17,1974	
.883	530.972	04	53	DEC 17,1974	
.900	531.725	04	54	DEC 17,1974	
.917	532.416	04	55	DEC 17,1974	
.933	533.137	04	56	DEC 17,1974	
.950	533.859	04	57	DEC 17,1974	
.967	534.423	04	58	DEC 17,1974	
.983	535.019	04	59	DEC 17,1974	
1.000	535.647	05	00	DEC 17,1974	
1.017	536.212	05	01	DEC 17,1974	
1.033	536.619	05	02	DEC 17,1974	
1.050	537.153	05	03	DEC 17,1974	
1.067	537.560	05	04	DEC 17,1974	
1.083	537.968	05	05	DEC 17,1974	
1.100	538.439	05	06	DEC 17,1974	
1.117	538.658	05	07	DEC 17,1974	
1.133	539.004	05	08	DEC 17,1974	
1.150	539.380	05	09	DEC 17,1974	
1.167	539.756	05	10	DEC 17,1974	
1.183	540.133	05	11	DEC 17,1974	
1.200	540.478	05	12	DEC 17,1974	
1.217	540.760	05	13	DEC 17,1974	
1.233	541.074	05	14	DEC 17,1974	
1.250	541.356	05	15	DEC 17,1974	
1.267	541.639	05	16	DEC 17,1974	
1.283	541.890	05	17	DEC 17,1974	
1.300	542.141	05	18	DEC 17,1974	
1.317	542.454	05	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
1.333	542.580	05	20	DEC 17,1974	
1.350	542.894	05	21	DEC 17,1974	
1.367	543.113	05	22	DEC 17,1974	
1.383	543.301	05	23	DEC 17,1974	
1.400	543.490	05	24	DEC 17,1974	
1.417	543.678	05	25	DEC 17,1974	
1.433	543.835	05	26	DEC 17,1974	END FLOW
1.450	544.023	05	27	DEC 17,1974	
1.467	544.180	05	28	DEC 17,1974	
1.483	544.399	05	29	DEC 17,1974	
1.500	544.525	05	30	DEC 17,1974	
1.517	544.682	05	31	DEC 17,1974	
1.533	544.839	05	32	DEC 17,1974	
1.550	544.933	05	33	DEC 17,1974	
1.567	545.090	05	34	DEC 17,1974	
1.583	545.215	05	35	DEC 17,1974	
1.600	545.341	05	36	DEC 17,1974	
1.617	545.435	05	37	DEC 17,1974	
1.633	545.592	05	38	DEC 17,1974	
1.650	545.717	05	39	DEC 17,1974	
1.667	545.780	05	40	DEC 17,1974	
1.683	545.905	05	41	DEC 17,1974	
1.700	546.062	05	42	DEC 17,1974	
1.717	546.156	05	43	DEC 17,1974	
1.733	546.219	05	44	DEC 17,1974	
1.750	546.376	05	45	DEC 17,1974	
1.767	546.439	05	46	DEC 17,1974	
1.783	546.501	05	47	DEC 17,1974	
1.800	546.564	05	48	DEC 17,1974	
1.817	546.690	05	49	DEC 17,1974	
1.833	546.784	05	50	DEC 17,1974	
1.850	546.878	05	51	DEC 17,1974	
1.867	546.941	05	52	DEC 17,1974	
1.883	547.097	05	53	DEC 17,1974	
1.900	547.160	05	54	DEC 17,1974	
1.917	547.223	05	55	DEC 17,1974	
1.933	547.317	05	56	DEC 17,1974	
1.950	547.317	05	57	DEC 17,1974	
1.967	547.411	05	58	DEC 17,1974	
1.983	547.505	05	59	DEC 17,1974	

```
JOB NUMBER                                                              DATE OF JOB
SPG-11210X                                                                 12-17-74

GAUGE/RUN NUMBER                                                        DATE OF RUN
193  DST NO. 26                                                            12-17-74

                                  SPERRY-SUN
                    PRECISION SUBSURFACE PRESSURE GAUGE REPORT

     DELTA    PRESSURE                    TIME      DATE              COMMENTS
     TIME      (PSI)                     HR MIN

     2.000     547.568                   06   00 DEC 17,1974
     2.017     547.662                   06   01 DEC 17,1974
     2.033     547.756                   06   02 DEC 17,1974
     2.050     547.788                   06   03 DEC 17,1974
     2.067     547.850                   06   04 DEC 17,1974
     2.083     547.882                   06   05 DEC 17,1974
     2.100     547.976                   06   06 DEC 17,1974
     2.117     548.039                   06   07 DEC 17,1974
     2.133     548.101                   06   08 DEC 17,1974
     2.150     548.101                   06   09 DEC 17,1974
     2.167     548.195                   06   10 DEC 17,1974
     2.183     548.290                   06   11 DEC 17,1974
     2.200     548.446                   06   12 DEC 17,1974
     2.217     548.509                   06   13 DEC 17,1974
     2.233     549.011                   06   14 DEC 17,1974
     2.250     549.764                   06   15 DEC 17,1974
     2.267     550.203                   06   16 DEC 17,1974
     2.283     549.921                   06   17 DEC 17,1974
     2.300     550.360                   06   18 DEC 17,1974
     2.317     550.674                   06   19 DEC 17,1974
     2.333     550.642                   06   20 DEC 17,1974
     2.350     550.925                   06   21 DEC 17,1974
     2.367     551.207                   06   22 DEC 17,1974
     2.383     551.019                   06   23 DEC 17,1974
     2.400     550.893                   06   24 DEC 17,1974
     2.417     551.176                   06   25 DEC 17,1974
     2.433     551.050                   06   26 DEC 17,1974
     2.450     551.333                   06   27 DEC 17,1974
     2.467     551.238                   06   28 DEC 17,1974
     2.483     551.489                   06   29 DEC 17,1974
     2.500     551.301                   06   30 DEC 17,1974
     2.517     551.176                   06   31 DEC 17,1974
     2.533     551.113                   06   32 DEC 17,1974
     2.550     551.552                   06   33 DEC 17,1974
     2.567     551.238                   06   34 DEC 17,1974
     2.583     551.176                   06   35 DEC 17,1974
     2.600     551.019                   06   36 DEC 17,1974   START JETTING
     2.617     592.649                   06   37 DEC 17,1974
     2.633     592.053                   06   38 DEC 17,1974
     2.650     546.376                   06   39 DEC 17,1974
```

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.667	506.597	06	40	DEC 17,1974	
2.683	503.899	06	41	DEC 17,1974	
2.700	491.821	06	42	DEC 17,1974	
2.717	490.409	06	43	DEC 17,1974	
2.733	489.342	06	44	DEC 17,1974	
2.750	488.652	06	45	DEC 17,1974	
2.767	488.401	06	46	DEC 17,1974	
2.783	488.119	06	47	DEC 17,1974	
2.800	487.774	06	48	DEC 17,1974	
2.817	487.586	06	49	DEC 17,1974	
2.833	487.272	06	50	DEC 17,1974	
2.850	487.178	06	51	DEC 17,1974	
2.867	487.209	06	52	DEC 17,1974	
2.883	487.021	06	53	DEC 17,1974	
2.900	486.707	06	54	DEC 17,1974	
2.917	486.833	06	55	DEC 17,1974	
2.933	486.644	06	56	DEC 17,1974	
2.950	486.456	06	57	DEC 17,1974	
2.967	486.613	06	58	DEC 17,1974	
2.983	486.456	06	59	DEC 17,1974	
3.000	486.393	07	00	DEC 17,1974	
3.017	486.299	07	01	DEC 17,1974	
3.033	486.362	07	02	DEC 17,1974	
3.050	486.362	07	03	DEC 17,1974	
3.067	486.331	07	04	DEC 17,1974	
3.083	486.299	07	05	DEC 17,1974	
3.100	486.237	07	06	DEC 17,1974	
3.117	486.080	07	07	DEC 17,1974	
3.133	486.205	07	08	DEC 17,1974	
3.150	485.923	07	09	DEC 17,1974	
3.167	485.986	07	10	DEC 17,1974	
3.183	485.986	07	11	DEC 17,1974	
3.200	485.923	07	12	DEC 17,1974	
3.217	485.797	07	13	DEC 17,1974	
3.233	485.797	07	14	DEC 17,1974	
3.250	485.703	07	15	DEC 17,1974	
3.267	485.641	07	16	DEC 17,1974	
3.283	485.735	07	17	DEC 17,1974	
3.300	485.829	07	18	DEC 17,1974	
3.317	485.641	07	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.333	485.672	07	20	DEC 17,1974	
3.350	485.546	07	21	DEC 17,1974	
3.367	485.703	07	22	DEC 17,1974	
3.383	485.609	07	23	DEC 17,1974	
3.400	485.609	07	24	DEC 17,1974	
3.417	485.578	07	25	DEC 17,1974	
3.433	485.546	07	26	DEC 17,1974	
3.450	485.578	07	27	DEC 17,1974	
3.467	485.390	07	28	DEC 17,1974	
3.483	485.358	07	29	DEC 17,1974	
3.500	485.578	07	30	DEC 17,1974	
3.517	485.421	07	31	DEC 17,1974	
3.533	485.358	07	32	DEC 17,1974	
3.550	485.327	07	33	DEC 17,1974	
3.567	485.327	07	34	DEC 17,1974	
3.583	485.390	07	35	DEC 17,1974	
3.600	485.358	07	36	DEC 17,1974	
3.617	485.390	07	37	DEC 17,1974	
3.633	485.578	07	38	DEC 17,1974	
3.650	485.170	07	39	DEC 17,1974	
3.667	485.578	07	40	DEC 17,1974	END JETTING
3.683	468.010	07	41	DEC 17,1974	
3.700	468.261	07	42	DEC 17,1974	
3.717	475.006	07	43	DEC 17,1974	
3.733	480.684	07	44	DEC 17,1974	
3.750	483.288	07	45	DEC 17,1974	
3.767	485.578	07	46	DEC 17,1974	
3.783	486.519	07	47	DEC 17,1974	
3.800	493.703	07	48	DEC 17,1974	
3.817	497.468	07	49	DEC 17,1974	
3.833	501.044	07	50	DEC 17,1974	
3.850	504.401	07	51	DEC 17,1974	
3.867	507.412	07	52	DEC 17,1974	
3.883	509.765	07	53	DEC 17,1974	
3.900	512.400	07	54	DEC 17,1974	
3.917	514.314	07	55	DEC 17,1974	
3.933	516.040	07	56	DEC 17,1974	
3.950	517.734	07	57	DEC 17,1974	
3.967	519.302	07	58	DEC 17,1974	
3.983	521.185	07	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.000	522.690	08	00	DEC 17,1974	
4.017	524.071	08	01	DEC 17,1974	
4.033	525.200	08	02	DEC 17,1974	
4.050	526.204	08	03	DEC 17,1974	
4.067	527.239	08	04	DEC 17,1974	
4.083	528.682	08	05	DEC 17,1974	
4.100	529.529	08	06	DEC 17,1974	
4.117	530.565	08	07	DEC 17,1974	
4.133	531.694	08	08	DEC 17,1974	
4.150	532.698	08	09	DEC 17,1974	
4.167	533.639	08	10	DEC 17,1974	
4.183	534.486	08	11	DEC 17,1974	
4.200	535.396	08	12	DEC 17,1974	
4.217	536.149	08	13	DEC 17,1974	
4.233	536.902	08	14	DEC 17,1974	
4.250	537.655	08	15	DEC 17,1974	
4.267	538.313	08	16	DEC 17,1974	
4.283	538.878	08	17	DEC 17,1974	
4.300	539.443	08	18	DEC 17,1974	
4.317	539.976	08	19	DEC 17,1974	
4.333	540.415	08	20	DEC 17,1974	
4.350	540.854	08	21	DEC 17,1974	
4.367	541.325	08	22	DEC 17,1974	
4.383	541.733	08	23	DEC 17,1974	
4.400	542.203	08	24	DEC 17,1974	
4.417	542.643	08	25	DEC 17,1974	
4.433	542.956	08	26	DEC 17,1974	
4.450	543.301	08	27	DEC 17,1974	
4.467	543.615	08	28	DEC 17,1974	
4.483	543.992	08	29	DEC 17,1974	
4.500	544.274	08	30	DEC 17,1974	
4.517	544.556	08	31	DEC 17,1974	
4.533	544.870	08	32	DEC 17,1974	
4.550	545.058	08	33	DEC 17,1974	
4.567	545.341	08	34	DEC 17,1974	
4.583	545.592	08	35	DEC 17,1974	
4.600	545.780	08	36	DEC 17,1974	
4.617	545.968	08	37	DEC 17,1974	
4.633	546.156	08	38	DEC 17,1974	
4.650	546.376	08	39	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.667	546.533	08	40	DEC 17,1974	
4.683	546.690	08	41	DEC 17,1974	
4.700	546.846	08	42	DEC 17,1974	
4.717	547.035	08	43	DEC 17,1974	
4.733	547.192	08	44	DEC 17,1974	
4.750	547.286	08	45	DEC 17,1974	
4.767	547.380	08	46	DEC 17,1974	
4.783	547.568	08	47	DEC 17,1974	2 GPM INSIDE
4.800	547.725	08	48	DEC 17,1974	DRILL PIPE
4.817	547.788	08	49	DEC 17,1974	
4.833	547.944	08	50	DEC 17,1974	
4.850	548.039	08	51	DEC 17,1974	
4.867	548.164	08	52	DEC 17,1974	
4.883	548.258	08	53	DEC 17,1974	
4.900	548.384	08	54	DEC 17,1974	
4.917	548.541	08	55	DEC 17,1974	
4.933	551.552	08	56	DEC 17,1974	
4.950	555.097	08	57	DEC 17,1974	
4.967	556.509	08	58	DEC 17,1974	
4.983	558.328	08	59	DEC 17,1974	
5.000	561.277	09	00	DEC 17,1974	
5.017	563.944	09	01	DEC 17,1974	
5.033	566.360	09	02	DEC 17,1974	
5.050	568.681	09	03	DEC 17,1974	
5.067	570.908	09	04	DEC 17,1974	
5.083	572.634	09	05	DEC 17,1974	
5.100	574.328	09	06	DEC 17,1974	
5.117	576.022	09	07	DEC 17,1974	5 GPM INSIDE
5.133	577.653	09	08	DEC 17,1974	DRILL PIPE
5.150	579.096	09	09	DEC 17,1974	
5.167	580.540	09	10	DEC 17,1974	
5.183	581.951	09	11	DEC 17,1974	
5.200	583.112	09	12	DEC 17,1974	
5.217	584.304	09	13	DEC 17,1974	
5.233	585.433	09	14	DEC 17,1974	
5.250	586.437	09	15	DEC 17,1974	
5.267	587.535	09	16	DEC 17,1974	
5.283	588.853	09	17	DEC 17,1974	
5.300	591.018	09	18	DEC 17,1974	
5.317	591.990	09	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.333	592.869	09	20	DEC 17,1974	
5.350	593.778	09	21	DEC 17,1974	
5.367	594.563	09	22	DEC 17,1974	
5.383	595.410	09	23	DEC 17,1974	
5.400	596.225	09	24	DEC 17,1974	
5.417	596.978	09	25	DEC 17,1974	
5.433	597.700	09	26	DEC 17,1974	
5.450	598.327	09	27	DEC 17,1974	11 GPM INSIDE
5.467	598.923	09	28	DEC 17,1974	DRILL PIPE
5.483	599.457	09	29	DEC 17,1974	
5.500	600.021	09	30	DEC 17,1974	
5.517	600.555	09	31	DEC 17,1974	
5.533	600.994	09	32	DEC 17,1974	
5.550	601.558	09	33	DEC 17,1974	
5.567	602.029	09	34	DEC 17,1974	
5.583	607.801	09	35	DEC 17,1974	
5.600	613.667	09	36	DEC 17,1974	
5.617	623.835	09	37	DEC 17,1974	
5.633	628.233	09	38	DEC 17,1974	
5.650	629.574	09	39	DEC 17,1974	
5.667	635.281	09	40	DEC 17,1974	
5.683	636.248	09	41	DEC 17,1974	
5.700	639.929	09	42	DEC 17,1974	
5.717	643.484	09	43	DEC 17,1974	
5.733	647.196	09	44	DEC 17,1974	
5.750	650.252	09	45	DEC 17,1974	
5.767	653.278	09	46	DEC 17,1974	
5.783	656.147	09	47	DEC 17,1974	21 G/M INSIDE
5.800	658.580	09	48	DEC 17,1974	DRILL PIPE
5.817	661.231	09	49	DEC 17,1974	OVERFLOW 14G/M
5.833	663.134	09	50	DEC 17,1974	
5.850	665.379	09	51	DEC 17,1974	
5.867	667.563	09	52	DEC 17,1974	
5.883	669.684	09	53	DEC 17,1974	
5.900	711.696	09	54	DEC 17,1974	
5.917	718.464	09	55	DEC 17,1974	
5.933	720.772	09	56	DEC 17,1974	
5.950	722.238	09	57	DEC 17,1974	
5.967	723.735	09	58	DEC 17,1974	
5.983	724.764	09	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.000	725.794	10	00	DEC 17,1974	
6.017	726.324	10	01	DEC 17,1974	
6.033	727.135	10	02	DEC 17,1974	
6.050	727.977	10	03	DEC 17,1974	
6.067	728.414	10	04	DEC 17,1974	
6.083	729.287	10	05	DEC 17,1974	
6.100	729.786	10	06	DEC 17,1974	
6.117	730.628	10	07	DEC 17,1974	
6.133	731.065	10	08	DEC 17,1974	
6.150	731.626	10	09	DEC 17,1974	
6.167	732.000	10	10	DEC 17,1974	
6.183	732.562	10	11	DEC 17,1974	
6.200	732.905	10	12	DEC 17,1974	
6.217	723.766	10	13	DEC 17,1974	
6.233	714.565	10	14	DEC 17,1974	
6.250	709.388	10	15	DEC 17,1974	
6.267	698.690	10	16	DEC 17,1974	
6.283	691.454	10	17	DEC 17,1974	
6.300	684.312	10	18	DEC 17,1974	
6.317	677.699	10	19	DEC 17,1974	
6.333	671.430	10	20	DEC 17,1974	
6.350	665.598	10	21	DEC 17,1974	
6.367	659.984	10	22	DEC 17,1974	
6.383	654.993	10	23	DEC 17,1974	
6.400	650.751	10	24	DEC 17,1974	
6.417	646.198	10	25	DEC 17,1974	
6.433	642.018	10	26	DEC 17,1974	
6.450	638.057	10	27	DEC 17,1974	
6.467	634.065	10	28	DEC 17,1974	
6.483	630.447	10	29	DEC 17,1974	
6.500	627.141	10	30	DEC 17,1974	
6.517	623.866	10	31	DEC 17,1974	
6.533	620.809	10	32	DEC 17,1974	
6.550	617.971	10	33	DEC 17,1974	
6.567	615.258	10	34	DEC 17,1974	
6.583	612.669	10	35	DEC 17,1974	
6.600	610.186	10	36	DEC 17,1974	
6.617	607.833	10	37	DEC 17,1974	
6.633	605.543	10	38	DEC 17,1974	
6.650	603.472	10	39	DEC 17,1974	

JOB NUMBER SPG-11210X	DATE OF JOB 12-17-74
GAUGE/RUN NUMBER 193 DST NO. 26	DATE OF RUN 12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
6.667	601.402	10	40	DEC 17,1974	
6.683	599.551	10	41	DEC 17,1974	
6.700	597.731	10	42	DEC 17,1974	
6.717	595.912	10	43	DEC 17,1974	
6.733	594.249	10	44	DEC 17,1974	
6.750	592.680	10	45	DEC 17,1974	
6.767	591.174	10	46	DEC 17,1974	
6.783	589.700	10	47	DEC 17,1974	
6.800	588.351	10	48	DEC 17,1974	
6.817	587.002	10	49	DEC 17,1974	
6.833	585.747	10	50	DEC 17,1974	
6.850	584.524	10	51	DEC 17,1974	
6.867	583.332	10	52	DEC 17,1974	
6.883	582.516	10	53	DEC 17,1974	21 GPM DOWN
6.900	581.167	10	54	DEC 17,1974	ANNULUS
6.917	580.226	10	55	DEC 17,1974	
6.933	579.285	10	56	DEC 17,1974	
6.950	578.375	10	57	DEC 17,1974	
6.967	577.591	10	58	DEC 17,1974	
6.983	576.775	10	59	DEC 17,1974	
7.000	575.991	11	00	DEC 17,1974	
7.017	575.238	11	01	DEC 17,1974	
7.033	574.579	11	02	DEC 17,1974	
7.050	573.889	11	03	DEC 17,1974	
7.067	573.324	11	04	DEC 17,1974	
7.083	572.697	11	05	DEC 17,1974	
7.100	572.163	11	06	DEC 17,1974	
7.117	571.599	11	07	DEC 17,1974	
7.133	571.003	11	08	DEC 17,1974	
7.150	570.532	11	09	DEC 17,1974	
7.167	569.967	11	10	DEC 17,1974	
7.183	569.591	11	11	DEC 17,1974	
7.200	569.152	11	12	DEC 17,1974	
7.217	568.681	11	13	DEC 17,1974	39 GPM DOWN
7.233	568.210	11	14	DEC 17,1974	ANNULUS
7.250	567.897	11	15	DEC 17,1974	
7.267	567.489	11	16	DEC 17,1974	
7.283	567.050	11	17	DEC 17,1974	
7.300	566.830	11	18	DEC 17,1974	
7.317	566.485	11	19	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.333	566.203	11	20	DEC 17,1974	
7.350	565.889	11	21	DEC 17,1974	
7.367	565.575	11	22	DEC 17,1974	
7.383	565.387	11	23	DEC 17,1974	
7.400	565.073	11	24	DEC 17,1974	
7.417	564.791	11	25	DEC 17,1974	
7.433	564.603	11	26	DEC 17,1974	
7.450	564.415	11	27	DEC 17,1974	
7.467	564.164	11	28	DEC 17,1974	
7.483	563.913	11	29	DEC 17,1974	
7.500	563.756	11	30	DEC 17,1974	
7.517	563.567	11	31	DEC 17,1974	
7.533	563.411	11	32	DEC 17,1974	
7.550	563.191	11	33	DEC 17,1974	61 GPM DOWN
7.567	563.066	11	34	DEC 17,1974	ANNULUS
7.583	562.940	11	35	DEC 17,1974	
7.600	562.752	11	36	DEC 17,1974	
7.617	562.532	11	37	DEC 17,1974	
7.633	562.438	11	38	DEC 17,1974	
7.650	562.313	11	39	DEC 17,1974	
7.667	562.250	11	40	DEC 17,1974	
7.683	562.093	11	41	DEC 17,1974	
7.700	561.936	11	42	DEC 17,1974	
7.717	561.842	11	43	DEC 17,1974	
7.733	561.779	11	44	DEC 17,1974	
7.750	561.685	11	45	DEC 17,1974	
7.767	561.591	11	46	DEC 17,1974	
7.783	561.466	11	47	DEC 17,1974	
7.800	561.371	11	48	DEC 17,1974	
7.817	561.277	11	49	DEC 17,1974	
7.833	561.121	11	50	DEC 17,1974	
7.850	561.058	11	51	DEC 17,1974	
7.867	560.964	11	52	DEC 17,1974	
7.883	560.901	11	53	DEC 17,1974	START RECOVERY
7.900	560.775	11	54	DEC 17,1974	
7.917	560.744	11	55	DEC 17,1974	
7.933	560.713	11	56	DEC 17,1974	
7.950	560.619	11	57	DEC 17,1974	
7.967	560.524	11	58	DEC 17,1974	
7.983	560.493	11	59	DEC 17,1974	

JOB NUMBER
SPG-11210X

DATE OF JOB
12-17-74

GAUGE/RUN NUMBER
193 DST NO. 26

DATE OF RUN
12-17-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
8.000	560.462	12	00	DEC 17,1974	
8.017	560.368	12	01	DEC 17,1974	
8.033	560.305	12	02	DEC 17,1974	
8.050	560.242	12	03	DEC 17,1974	
8.067	560.211	12	04	DEC 17,1974	
8.083	560.117	12	05	DEC 17,1974	
8.100	560.054	12	06	DEC 17,1974	
8.117	559.991	12	07	DEC 17,1974	
8.133	559.991	12	08	DEC 17,1974	
8.150	559.897	12	09	DEC 17,1974	
8.167	559.834	12	10	DEC 17,1974	
8.183	559.772	12	11	DEC 17,1974	
8.200	559.803	12	12	DEC 17,1974	
8.217	559.803	12	13	DEC 17,1974	END RECOVERY
8.233	559.677	12	14	DEC 17,1974	
8.250	559.646	12	15	DEC 17,1974	
8.267	559.583	12	16	DEC 17,1974	
8.283	559.489	12	17	DEC 17,1974	
8.300	559.521	12	18	DEC 17,1974	
8.317	559.458	12	19	DEC 17,1974	
8.333	559.426	12	20	DEC 17,1974	
8.350	559.364	12	21	DEC 17,1974	END TEST

502 POINTS REPORTED THIS RUN

JOHNSTON

Schlumberger

technical report

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 27
COUNTY RIO BLANCO
STATE COLORADO

RECEIVED
JAN 2 1975
A. J. ROGERS

II B-1213

F.R. #09111 C

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S-G #17
TEST NO. 27
COUNTY RIO BLANCO
STATE COLORADO

JOHNSTON
...found a better way

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool (12-18-74)	1520	-	-
CLOSED FOR INITIAL SHUT-IN	1522	-	-
FINISHED SHUT-IN	1552	-	-
RE-OPENED TOOL	1555	-	-
STARTED INJECTING WATER AT			
2 GAL/MIN.	2100	-	-
INCREASED INJECTION TO			
5 GAL/MIN.	2120	-	-
INCREASED INJECTION TO			
11 GAL/MIN.	2140	-	-
DECREASED INJECTION TO			
7 GAL/MIN.	2155	-	-
STOPPED INJECTION	2200	-	-
(12-19-74)			
EQUALIZED MUD	0001	-	-
PULLED PACKER LOOSE	0006	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER - FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036 Ft.
Net Productive Interval 59 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1770 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1379' I.D. -
Packer Depth(s) 1707' & 1711' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: ______

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202

Company ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S. G. #17 Location 436 FWL & 181 FSL SEC. 16-3s-96w
Test Interval 1711' TO 1770' Test # 27 Date 12-18-74
County RIO BLANCO State COLORADO II B-1214
Technician TAYLOR (VERNAL) Test Approved By MR. JERRY L. FUSSELL

Field Report No. 09111 C
No. Reports Requested 14 (13x)

PRESSURE DATA

Instrument No.	4633 N		
Capacity (P.S.I.G.)	2650		
Instrument Depth	1686'		
Instrument Opening	INSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	–		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel 0.003470 inches per min.

PRESSURE INCREMENTS

Point	Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
[illegible]		534.9		36	146.8		68	377.5	
2		550.6		37	159.9		69	382.8	
3	0	51.0		38	167.7		70	388.0	
	1	61.5		39	180.9		71	392.0	
4	2	65.5		40	188.7		72	395.9	
	3	274.0		41	199.2		73	401.1	
	4	395.9		42	208.4		74	405.1	
	5	495.5		43	217.6		75	410.3	
	6	517.8		44	224.1		76	414.3	
	7	530.9		45	233.3		77	418.2	
	8	534.9		46	241.2		78	422.1	
	9	538.8		47	249.0		79	426.1	
	10	540.1		48	256.9		80	430.0	
	11	542.7		49	264.8		81	433.9	
	12	544.1		50	270.0		82	436.5	
	13	545.4		51	276.7		83	440.5	
	14	546.7		52	285.8		84	443.1	
	15	546.7		53	291.0		85	445.7	
	16	548.0		54	298.9		86	449.7	
	17	548.0		55	305.4		87	452.3	
	18	548.0		56	312.0		88	456.2	
	19	549.3		57	318.5		89	458.8	
	20	549.3		58	325.1		90	461.5	
	22	549.3		59	329.0		91	464.1	
	24	550.6		60	336.9		92	466.7	
	26	550.6		61	340.8		93	468.0	
	28	551.9		62	348.7		94	471.9	
5	30	551.9		63	353.9	II B-1215	95	474.6	
	32	553.2		64	359.2		96	475.9	
6	34	553.2		65	363.1		97	478.5	
7	34	86.5		66	369.7		98	481.1	
	35	129.7		67	373.6		99	482.4	

PRESSURE DATA

Instrument No.	4633 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.* Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
100	485.1		144	534.9		10 208	489.0	
101	486.7		146	536.2		210	487.7	
102	489.0		148	537.5		212	486.4	
103	490.3		150	537.5		214	486.4	
104	492.9		152	538.8		216	486.4	
105	494.2		154	540.1		218	486.4	
106	495.5		156	540.1		220	486.4	
107	498.2		158	541.4		222	486.4	
108	499.5		160	541.4		224	486.4	
109	500.8		162	542.7		226	486.4	
110	502.1		164	542.7		228	485.1	
111	504.7		166	544.1		230	485.1	
112	506.0		168	544.1		235	485.1	
113	507.3		170	544.1		240	485.1	
114	508.7		172	544.1		245	483.7	
115	510.0		174	545.4		250	483.7	
116	511.3		176	545.4		255	482.4	
117	512.6		178	546.7		260	482.4	
118	513.9		180	546.7		265	482.4	
119	515.2		182	548.0		11 266	482.4	
120	516.5		184	549.3		12 267	451.0	
122	519.1		186	549.3		268	454.9	
124	520.5		188	550.6		269	460.1	
126	523.1		190	550.6		270	464.1	
128	524.4		192	550.6		271	469.3	
130	525.7		194	551.9		272	471.9	
132	527.0		196	551.9		273	474.6	
134	528.3		198	551.9	II B-1216	274	478.5	
136	529.6		200	551.9		275	481.1	
138	532.3		202	551.9		276	483.7	
140	532.3		8 204	551.9		277	486.4	
142	533.6		9 206	592.6		278	487.7	

PRESSURE DATA

Instrument No.		4633 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
279	491.6		312	532.3		374	601.8	
280	492.9		314	534.9		376	608.3	
281	495.5		316	536.2		378	613.6	
282	498.2		318	537.5		380	618.8	
283	500.8		320	537.5		14 382	624.0	
284	502.1		322	538.8		384	642.4	
285	503.4		324	540.1		386	660.8	
286	506.0		326	541.4		388	673.9	
287	506.0		328	541.4		390	690.9	
288	507.3		330	542.7		392	706.6	
289	508.7		332	544.1		394	717.1	
290	510.0		334	544.1		396	728.9	
291	511.3		336	544.1		398	735.5	
292	512.6		338	545.4		400	735.5	
293	513.9		340	545.4		15 402	736.8	
294	515.2		342	545.4		404	731.6	
295	515.2		344	546.7		406	721.1	
296	516.5		346	548.0		408	709.3	
297	517.8		348	549.3		410	700.1	
298	520.5		350	551.9		412	692.2	
299	521.8		352	553.2		414	685.7	
300	523.1		354	554.5		416	675.2	
301	523.1		356	557.2		418	668.6	
302	524.4		358	558.5		420	662.1	
303	524.4		360	558.5		422	655.5	
304	525.7		362	558.5		424	650.3	
305	527.0		13 363	558.5		426	645.0	
306	528.3		364	565.0	II B-1217	428	638.5	
307	529.6		366	572.9		430	633.2	
308	529.6		368	579.5		432	629.3	
309	530.9		370	587.3		434	626.7	
310	530.9		372	595.2		436	622.7	

PRESSURE DATA

Instrument No.	4633 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
438	618.8		502	567.7				
440	614.9		504	567.7				
442	610.9		506	567.7				
444	608.3		508	567.7				
446	605.7		510	567.7				
448	601.8		512	566.3				
450	599.1		514	566.3				
452	596.5		516	566.3				
454	593.9		518	565.0				
456	592.6		520	565.0				
458	590.0		16 521	565.0				
460	588.6		17	540.1				
462	586.0							
464	584.7							
466	583.4							
468	582.1							
470	579.5							
472	579.5							
474	578.2							
476	576.8							
478	575.5							
480	575.5							
482	574.2							
484	572.9							
486	572.9							
488	571.6							
490	571.6							
492	570.3							
494	570.3							
496	569.0							
498	569.0							
500	569.0							

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)	2800		
Instrument Depth	1713'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	–		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003677 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1	541.6		36	165.0		68	389.3	
2	557.1		37	174.9		69	392.1	
3 0	62.1		38	184.8		70	397.7	
1	76.2		39	193.2		71	402.0	
4 2	87.5		40	204.5		72	406.2	
3	411.8		41	213.0		73	410.4	
4	492.2		42	220.0		74	414.7	
5	523.3		43	231.3		75	417.5	
6	537.4		44	238.4		76	421.7	
7	543.0		45	246.8		77	426.0	
8	545.8		46	256.7		78	430.2	
9	547.2		47	263.8		79	433.0	
10	548.7		48	270.8		80	437.2	
11	550.1		49	277.9		81	440.1	
12	551.5		50	283.5		82	444.3	
13	552.9		51	292.0		83	447.1	
14	552.9		52	299.0		84	449.9	
15	552.9		53	306.1		85	454.2	
16	554.3		54	313.1		86	457.0	
17	554.3		55	318.8		87	459.8	
18	554.3		56	324.4		88	462.6	
19	555.7		57	330.0		89	465.4	
20	555.7		58	337.1		90	468.3	
22	555.7		59	341.3		91	471.1	
24	557.1		60	348.3		92	473.9	
26	557.1		61	354.0		93	475.3	
28	557.1		62	358.3		94	478.1	
5 30	557.1		63	363.9	II B-1219	95	481.0	
32	558.5		64	369.5		96	482.4	
6 34	558.5		65	375.2		97	485.2	
7 34	98.7		66	379.4		98	488.0	
35	153.7		67	385.0		99	489.4	

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel __________ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt
100	492.2		144	543.0		10 208	496.5	
101	493.7		146	543.0		210	493.7	
102	496.5		148	543.0		212	493.7	
103	499.3		150	544.4		214	493.7	
104	500.7		152	545.8		216	493.7	
105	500.7		154	545.8		218	493.7	
106	502.1		156	547.2		220	493.7	
107	504.9		158	548.7		222	493.7	
108	507.8		160	548.7		224	493.7	
109	509.2		162	548.7		226	493.7	
110	510.6		164	550.1		228	493.7	
111	513.4		166	550.1		230	493.7	
112	514.8		168	551.5		235	492.2	
113	514.8		170	551.5		240	492.2	
114	516.2		172	552.9		245	492.2	
115	517.6		174	552.9		250	492.2	
116	519.0		176	552.9		255	489.4	
117	520.4		178	552.9		260	489.4	
118	521.9		180	554.3		265	489.4	
119	521.9		182	555.7		11 266	489.4	
120	523.3		184	555.7		12 267	457.0	
122	526.1		186	557.1		268	462.6	
124	527.5		188	558.5		269	468.3	
126	530.3		190	558.5		270	471.1	
128	531.7		192	559.9		271	475.3	
130	533.1		194	559.9		272	479.5	
132	534.6		196	559.9		273	482.4	
134	536.0		198	559.9	II B-1220	274	483.8	
136	537.4		200	559.9		275	488.0	
138	538.8		202	559.9		276	490.8	
140	540.2		8 204	559.9		277	493.7	
142	541.6		9 206	600.8		278	496.5	

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.* Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt	Point Minutes	Pressure	T + Δt / Δt
279	497.9		312	541.6		374	607.9	
280	500.7		314	543.0		376	614.9	
281	503.5		316	543.0		378	619.2	
282	504.9		318	544.4		380	626.2	
283	507.8		320	545.8		14 382	630.5	
284	509.2		322	547.2		384	644.6	
285	510.6		324	547.2		386	664.3	
286	512.0		326	548.7		388	679.8	
287	514.8		328	550.1		390	696.7	
288	516.2		330	550.1		392	710.9	
289	516.2		332	550.1		394	723.5	
290	517.6		334	550.1		396	733.4	
291	519.0		336	551.5		398	741.9	
292	520.4		338	551.5		400	741.9	
293	521.9		340	552.9		15 402	741.9	
294	523.3		342	554.3		404	736.2	
295	523.3		344	554.3		406	726.4	
296	524.7		346	555.7		408	716.5	
297	527.5		348	555.7		410	706.6	
298	528.9		350	558.5		412	698.2	
299	528.9		352	561.3		414	689.7	
300	530.3		354	562.8		416	684.1	
301	530.3		356	564.2		418	677.0	
302	531.7		358	565.6		420	670.0	
303	533.1		360	565.6		422	664.3	
304	534.6		362	567.0		424	658.7	
305	534.6		13 363	567.0		426	653.0	
306	536.0		364	569.8	II B-1221	428	647.4	
307	537.4		366	578.3		430	641.7	
308	537.4		368	588.1		432	637.5	
309	538.8		370	593.8		434	633.3	
310	540.2		372	602.3		436	629.0	

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09111 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

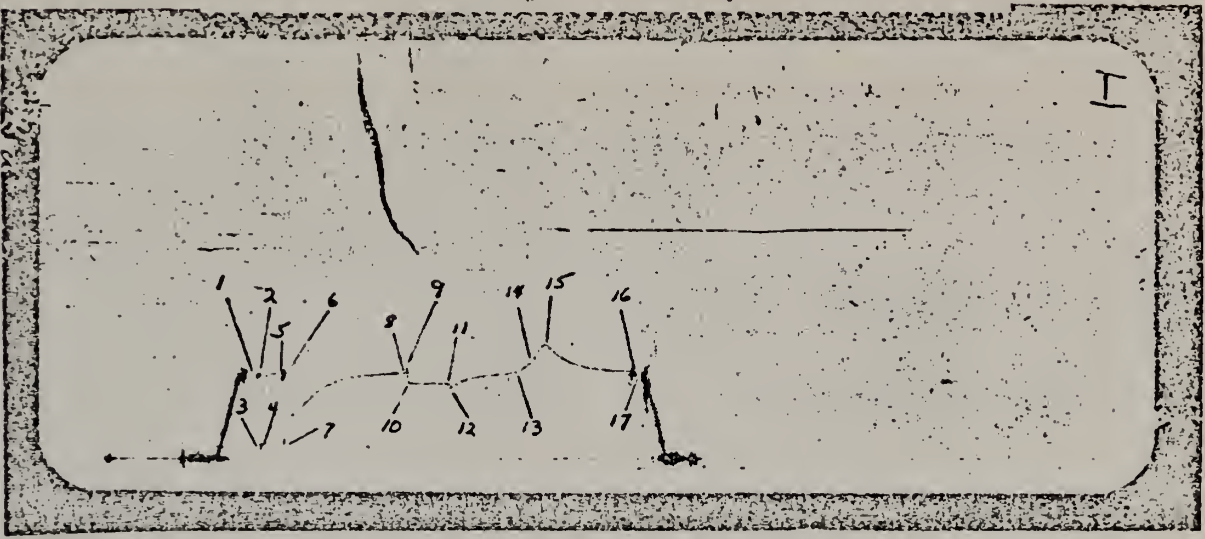
Clock Travel ______ inches per min.

PRESSURE INCREMENTS

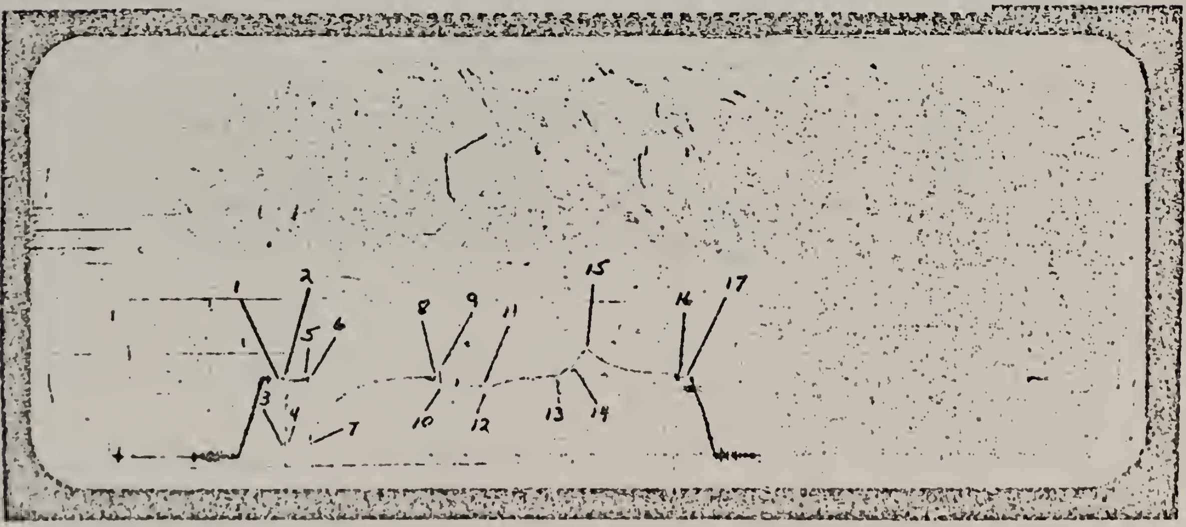
Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
438	626.2		502	575.5				
440	622.0		504	575.5				
442	619.2		506	575.5				
444	616.4		508	575.5				
446	612.1		510	575.5				
448	609.3		512	575.5				
450	606.5		514	575.5				
452	603.7		516	574.0				
454	602.3		518	574.0				
456	599.4		520	574.0				
458	598.0		16 521	574.0				
460	596.6		17	547.2				
462	593.8							
464	592.4							
466	591.0							
468	589.6							
470	588.1							
472	588.1							
474	585.3							
476	585.3							
478	583.9							
480	583.9							
482	582.5							
484	581.1							
486	579.7							
488	579.7							
490	578.3							
492	578.3							
494	578.3							
496	578.3							
498	576.9							
500	576.9							

II B-1222

FIELD REPORT NO.	RECORDER NO.
09111 C	4633 N
CAPACITY	REPORTS REQUESTED
2650#	14+



FIELD REPORT NO.	RECORDER NO.
09111 C	32342 N
CAPACITY	REPORTS REQUESTED
2800#	14+



DST 27
1711-1770

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG-11210Y Date 12/18/74 Run DST-27 Office CASPER

Customer Arco Et Al Location Sorghum Gulch

State Colorado County/~~Parish~~ Rio Blanco

Well Sorghum Gulch No. 17 Field Tract Cb

USE MILITARY TIME FOR ALL TIMES

		Time	Date		Time	Date	Time Charged
Arrive: Well/Dock	1.	1130	12/18/74	2.			
Depart: Well/Dock	1.	0230	12/19/74	2.			Hrs.
Gauge Start in Hole	1.	1317	12/18/74	2.	1300	12/18/74	
Gauge Out of Hole	1.	0150	12/19/74	2.	0114	12/19/74	Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # 222 Element # 35990 Range 1000 Time Mode 1 min

Btm.Gauge # 193 Element # 35989 Range 1000 Time Mode 1 min

Type Tool DST Test Depth 1711 – 1770 Zero Point Ground level

Packer Depth 1711 Tail Pipe Depth 1667 Top Gauge Depth 1667

Bottom Hole Temp. 96° Atmos. Temp. Bottom Gauge Depth 1732

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	1453	12/18/74	Initial Hydrostatic Mud	504
Packer Set	1519	12/18/74	Initial Draw Down	21
Initial Open	1522	12/18/74	Initial Build-Up	504
Initial Shut-In	1524	12/18/74	Final Flow	70-546
Start Flow	1555	12/18/74	Final Build-Up	504
Final Shut-In	0002	12/19/74	Final Hydrostatic Mud	525
Packer Unseated	0006	12/19/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge 1339 1340 1341 Bottom Gauge 1316 1317 1318

Remarks

SP-423

II B-1224

Ken Pemles
Operator

JOB NUMBER SPG 11210 Y	DATE OF JOB DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 222 WITH 1400 LB. ELEMENT.

[illegible]UGE LOCATED OUTSIDE D.P.

IN ANNULUS ABOVE PACKER

DEPTH OF GAUGE IS 1667 FT.

TEST INTERVAL SURFACE TO 1711 FT,

SET PACKER DEPTH IS 1711 FT.

INITIAL HYDROSTATIC IS 519 PSI

FINAL HYDROSTATIC IS 526 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

514 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                        DATE OF JOB
SPG 11210 Y                                                  DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                  DATE OF RUN
222    DST NO, 27                                            JANUARY 10,1975

                                SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA    PRESSURE                       TIME      DATE            COMMENTS
    TIME      (PSI)                       HR MIN

    0.000    519,335                      15  24 DEC 18,1974    INITIAL SHUTIN
     .017    518,768                      15  25 DEC 18,1974
     .033    518,901                      15  26 DEC 18,1974
     .050    518,935                      15  27 DEC 18,1974
     .067    518,968                      15  28 DEC 18,1974
     .083    518,935                      15  29 DEC 18,1974
     .100    518,901                      15  30 DEC 18,1974
     .117    519,002                      15  31 DEC 18,1974
     .133    519,035                      15  32 DEC 18,1974
     .150    519,002                      15  33 DEC 18,1974
     .167    519,068                      15  34 DEC 18,1974
     .183    519,035                      15  35 DEC 18,1974
     .200    519,035                      15  36 DEC 18,1974
     .217    519,068                      15  37 DEC 18,1974
     .233    519,035                      15  38 DEC 18,1974
     .250    519,035                      15  39 DEC 18,1974
     .267    519,068                      15  40 DEC 18,1974
     .283    519,102                      15  41 DEC 18,1974
     .300    519,168                      15  42 DEC 18,1974
     .317    519,135                      15  43 DEC 18,1974
     .333    519,135                      15  44 DEC 18,1974
     .350    519,202                      15  45 DEC 18,1974
     .367    519,235                      15  46 DEC 18,1974
     .383    519,269                      15  47 DEC 18,1974
     .400    519,302                      15  48 DEC 18,1974
     .417    519,269                      15  49 DEC 18,1974
     .433    519,335                      15  50 DEC 18,1974
     .450    519,335                      15  51 DEC 18,1974
     .467    519,436                      15  52 DEC 18,1974
     .483    519,235                      15  53 DEC 18,1974
     .500    519,102                      15  54 DEC 18,1974    END SHUTIN
```

```
                        31 POINTS REPORTED THIS RUN
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222   DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	519.102	16	00	DEC 18,1974	OPEN TO FLOW
.016	519.302	16	01	DEC 18,1974	
.033	519.436	16	02	DEC 18,1974	
.049	519.469	16	03	DEC 18,1974	
.065	519.502	16	04	DEC 18,1974	
.082	519.569	16	05	DEC 18,1974	
.098	519.569	16	06	DEC 18,1974	
.114	519.636	16	07	DEC 18,1974	
.131	519.669	16	08	DEC 18,1974	
.147	519.703	16	09	DEC 18,1974	
.163	519.736	16	10	DEC 18,1974	
.180	519.703	16	11	DEC 18,1974	
.196	519.803	16	12	DEC 18,1974	
.212	519.836	16	13	DEC 18,1974	
.228	519.870	16	14	DEC 18,1974	
.245	519.836	16	15	DEC 18,1974	
.261	519.836	16	16	DEC 18,1974	
.277	519.903	16	17	DEC 18,1974	
.294	520.003	16	18	DEC 18,1974	
.310	519.903	16	19	DEC 18,1974	
.326	520.037	16	20	DEC 18,1974	
.343	520.037	16	21	DEC 18,1974	
.359	519.936	16	22	DEC 18,1974	
.375	519.970	16	23	DEC 18,1974	
.392	520.003	16	24	DEC 18,1974	
.408	520.070	16	24	DEC 18,1974	
.424	520.103	16	25	DEC 18,1974	
.441	520.103	16	26	DEC 18,1974	
.457	520.037	16	27	DEC 18,1974	
.473	520.070	16	28	DEC 18,1974	
.490	520.070	16	29	DEC 18,1974	
.506	520.070	16	30	DEC 18,1974	
.522	520.103	16	31	DEC 18,1974	
.539	520.137	16	32	DEC 18,1974	
.555	520.137	16	33	DEC 18,1974	
.571	520.170	16	34	DEC 18,1974	
.588	520.204	16	35	DEC 18,1974	
.604	520.270	16	36	DEC 18,1974	
.620	520.270	16	37	DEC 18,1974	
.637	520.270	16	38	DEC 18,1974	

```
JOB NUMBER                                                       DATE OF JOB
SPG 11210 Y                                                DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                 DATE OF RUN
222   DST NO, 27                                            JANUARY 10, 1975

                                SPERRY-SUN
               PRECISION SUBSURFACE PRESSURE GAUGE REPORT


    DELTA   PRESSURE                TIME      DATE               COMMENTS
    TIME     (PSI)                 HR MIN

     .653    520.270               16   39 DEC 18,1974
     .669    520.270               16   40 DEC 18,1974
     .685    520.304               16   41 DEC 18,1974
     .702    520.304               16   42 DEC 18,1974
     .718    520.370               16   43 DEC 18,1974
     .734    520.437               16   44 DEC 18,1974
     .751    520.437               16   45 DEC 18,1974
     .767    520.404               16   46 DEC 18,1974
     .783    520.437               16   47 DEC 18,1974
     .800    520.537               16   48 DEC 18,1974
     .816    520.504               16   49 DEC 18,1974
     .832    520.437               16   50 DEC 18,1974
     .849    520.537               16   51 DEC 18,1974
     .865    520.571               16   52 DEC 18,1974
     .881    520.571               16   53 DEC 18,1974
     .898    520.571               16   54 DEC 18,1974
     .914    520.537               16   55 DEC 18,1974
     .930    520.604               16   56 DEC 18,1974
     .947    520.671               16   57 DEC 18,1974
     .963    520.671               16   58 DEC 18,1974
     .979    520.638               16   59 DEC 18,1974
     .996    520.604               17   00 DEC 18,1974
    1.012    520.704               17   01 DEC 18,1974
    1.028    520.671               17   02 DEC 18,1974
    1.045    520.638               17   03 DEC 18,1974
    1.061    520.738               17   04 DEC 18,1974
    1.077    520.771               17   05 DEC 18,1974
    1.093    520.771               17   06 DEC 18,1974
    1.110    520.738               17   07 DEC 18,1974
    1.126    520.771               17   08 DEC 18,1974
    1.142    520.838               17   09 DEC 18,1974
    1.159    520.805               17   10 DEC 18,1974
    1.175    520.838               17   11 DEC 18,1974
    1.191    520.871               17   11 DEC 18,1974
    1.208    520.905               17   12 DEC 18,1974
    1.224    520.905               17   13 DEC 18,1974
    1.240    520.938               17   14 DEC 18,1974
    1.257    520.971               17   15 DEC 18,1974
    1.273    520.971               17   16 DEC 18,1974
    1.289    520.971               17   17 DEC 18,1974
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.306	520.971	17	18	DEC 18,1974	
1.322	521.005	17	19	DEC 18,1974	
1.338	521.038	17	20	DEC 18,1974	
1.355	521.005	17	21	DEC 18,1974	
1.371	521.038	17	22	DEC 18,1974	
1.387	521.105	17	23	DEC 18,1974	
1.404	521.038	17	24	DEC 18,1974	
1.420	521.105	17	25	DEC 18,1974	
1.436	521.105	17	26	DEC 18,1974	
1.453	521.072	17	27	DEC 18,1974	
1.469	521.138	17	28	DEC 18,1974	
1.485	521.105	17	29	DEC 18,1974	
1.502	521.138	17	30	DEC 18,1974	
1.518	521.205	17	31	DEC 18,1974	
1.534	521.239	17	32	DEC 18,1974	
1.550	521.239	17	33	DEC 18,1974	
1.567	521.239	17	34	DEC 18,1974	
1.583	521.272	17	35	DEC 18,1974	
1.599	521.272	17	36	DEC 18,1974	
1.616	521.272	17	37	DEC 18,1974	
1.632	521.239	17	38	DEC 18,1974	
1.648	521.305	17	39	DEC 18,1974	
1.665	521.372	17	40	DEC 18,1974	
1.681	521.339	17	41	DEC 18,1974	
1.697	521.305	17	42	DEC 18,1974	
1.714	521.372	17	43	DEC 18,1974	
1.730	521.439	17	44	DEC 18,1974	
1.746	521.406	17	45	DEC 18,1974	
1.763	521.439	17	46	DEC 18,1974	
1.779	521.439	17	47	DEC 18,1974	
1.795	521.472	17	48	DEC 18,1974	
1.812	521.472	17	49	DEC 18,1974	
1.828	521.472	17	50	DEC 18,1974	
1.844	521.539	17	51	DEC 18,1974	
1.861	521.539	17	52	DEC 18,1974	
1.877	521.506	17	53	DEC 18,1974	
1.893	521.439	17	54	DEC 18,1974	
1.910	521.606	17	55	DEC 18,1974	
1.926	521.539	17	56	DEC 18,1974	
1.942	521.606	17	57	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.959	521.572	17	58	DEC 18,1974	
1.975	521.639	17	58	DEC 18,1974	
1.991	521.606	17	59	DEC 18,1974	
2.007	521.639	18	00	DEC 18,1974	
2.024	521.673	18	01	DEC 18,1974	
2.040	521.673	18	02	DEC 18,1974	
2.056	521.706	18	03	DEC 18,1974	
2.073	521.739	18	04	DEC 18,1974	
2.089	521.673	18	05	DEC 18,1974	
2.105	521.739	18	06	DEC 18,1974	
2.122	521.773	18	07	DEC 18,1974	
2.138	521.773	18	08	DEC 18,1974	
2.154	521.773	18	09	DEC 18,1974	
2.171	521.840	18	10	DEC 18,1974	
2.187	521.773	18	11	DEC 18,1974	
2.203	521.773	18	12	DEC 18,1974	
2.220	521.806	18	13	DEC 18,1974	
2.236	521.906	18	14	DEC 18,1974	
2.252	521.906	18	15	DEC 18,1974	
2.269	521.873	18	16	DEC 18,1974	
2.285	521.873	18	17	DEC 18,1974	
2.301	521.973	18	18	DEC 18,1974	
2.318	521.873	18	19	DEC 18,1974	
2.334	521.940	18	20	DEC 18,1974	
2.350	521.906	18	21	DEC 18,1974	
2.367	521.973	18	22	DEC 18,1974	
2.383	522.040	18	23	DEC 18,1974	
2.399	521.873	18	24	DEC 18,1974	
2.415	522.007	18	25	DEC 18,1974	
2.432	522.007	18	26	DEC 18,1974	
2.448	522.040	18	27	DEC 18,1974	
2.464	522.073	18	28	DEC 18,1974	
2.481	522.007	18	29	DEC 18,1974	
2.497	522.107	18	30	DEC 18,1974	
2.513	522.107	18	31	DEC 18,1974	
2.530	522.140	18	32	DEC 18,1974	
2.546	522.073	18	33	DEC 18,1974	
2.562	522.140	18	34	DEC 18,1974	
2.579	522.140	18	35	DEC 18,1974	
2.595	522.107	18	36	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
2 DST NO, 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
2.611	522.173	18 37	DEC 18,1974	
2.628	522.173	18 38	DEC 18,1974	
2.644	522.240	18 39	DEC 18,1974	
2.660	522.207	18 40	DEC 18,1974	
2.677	522.207	18 41	DEC 18,1974	
2.693	522.173	18 42	DEC 18,1974	
2.709	522.374	18 43	DEC 18,1974	
2.726	522.274	18 44	DEC 18,1974	
2.742	522.173	18 45	DEC 18,1974	
2.758	522.340	18 45	DEC 18,1974	
2.775	522.307	18 46	DEC 18,1974	START JETTING
2.791	522.240	18 47	DEC 18,1974	
2.807	522.274	18 48	DEC 18,1974	
2.824	522.307	18 49	DEC 18,1974	
2.840	522.340	18 50	DEC 18,1974	
2.856	522.340	18 51	DEC 18,1974	
2.872	522.340	18 52	DEC 18,1974	
2.889	522.374	18 53	DEC 18,1974	
2.905	522.374	18 54	DEC 18,1974	
2.921	522.374	18 55	DEC 18,1974	
2.938	522.340	18 56	DEC 18,1974	
2.954	522.374	18 57	DEC 18,1974	
2.970	522.407	18 58	DEC 18,1974	
2.987	522.374	18 59	DEC 18,1974	
3.003	522.374	19 00	DEC 18,1974	
3.019	522.441	19 01	DEC 18,1974	
3.036	522.474	19 02	DEC 18,1974	
3.052	522.407	19 03	DEC 18,1974	
3.068	522.407	19 04	DEC 18,1974	
3.085	522.507	19 05	DEC 18,1974	
3.101	522.507	19 06	DEC 18,1974	
3.117	522.474	19 07	DEC 18,1974	
3.134	522.541	19 08	DEC 18,1974	
3.150	522.574	19 09	DEC 18,1974	
3.166	522.607	19 10	DEC 18,1974	
3.183	522.541	19 11	DEC 18,1974	
3.199	522.541	19 12	DEC 18,1974	
3.215	522.607	19 13	DEC 18,1974	
3.232	522.607	19 14	DEC 18,1974	
3.248	522.607	19 15	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.264	522,607	19	16	DEC 18,1974	
3,280	522,607	19	17	DEC 18,1974	
3,297	522,607	19	18	DEC 18,1974	
3,313	522,641	19	19	DEC 18,1974	
3,329	522,607	19	20	DEC 18,1974	
3,346	522,674	19	21	DEC 18,1974	
3.362	522,708	19	22	DEC 18,1974	
3.378	522,674	19	23	DEC 18,1974	
3,395	522,708	19	24	DEC 18,1974	
3,411	522,708	19	25	DEC 18,1974	
3.427	522,774	19	26	DEC 18,1974	
3,444	522,708	19	27	DEC 18,1974	
3.460	522,708	19	28	DEC 18,1974	
3,476	522,774	19	29	DEC 18,1974	
3.493	522,774	19	30	DEC 18,1974	
3.509	522,741	19	31	DEC 18,1974	
3.525	522,808	19	32	DEC 18,1974	
3.542	522,841	19	32	DEC 18,1974	
3.558	522,808	19	33	DEC 18,1974	
3.574	522,875	19	34	DEC 18,1974	
3.591	522,774	19	35	DEC 18,1974	
3.607	522,875	19	36	DEC 18,1974	
3.623	522,875	19	37	DEC 18,1974	
3,640	522,841	19	38	DEC 18,1974	
3,656	522,841	19	39	DEC 18,1974	
3.672	522,908	19	40	DEC 18,1974	
3.689	522,908	19	41	DEC 18,1974	
3.705	522,975	19	42	DEC 18,1974	
3.721	522,875	19	43	DEC 18,1974	
3,737	522,975	19	44	DEC 18,1974	
3,754	522,941	19	45	DEC 18,1974	
3.770	522,908	19	46	DEC 18,1974	
3,786	522,908	19	47	DEC 18,1974	END JETTING
3.803	523,008	19	48	DEC 18,1974	
3.819	523,042	19	49	DEC 18,1974	
3,835	523,042	19	50	DEC 18,1974	
3,852	523,042	19	51	DEC 18,1974	
3,868	523,042	19	52	DEC 18,1974	
3.884	523,042	19	53	DEC 18,1974	
3.901	522,975	19	54	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
3.917	523,042	19	55	DEC 18,1974	
3.933	523,108	19	56	DEC 18,1974	
3,950	523,108	19	57	DEC 18,1974	
3,966	523,075	19	58	DEC 18,1974	
3,982	523.042	19	59	DEC 18,1974	
3,999	523.108	20	00	DEC 18,1974	
4.015	523.142	20	01	DEC 18,1974	
4.031	523,108	20	02	DEC 18,1974	
4,048	523,208	20	03	DEC 18,1974	
4,064	523,175	20	04	DEC 18,1974	
4,080	523,242	20	05	DEC 18,1974	
4,097	523.208	20	06	DEC 18,1974	
4.113	523,208	20	07	DEC 18,1974	
4,129	523,175	20	08	DEC 18,1974	
4.146	523.309	20	09	DEC 18,1974	
4.162	523.275	20	10	DEC 18,1974	
4.178	523.208	20	11	DEC 18,1974	
4.194	523,275	20	12	DEC 18,1974	
4,211	523.242	20	13	DEC 18,1974	
4.227	523.242	20	14	DEC 18,1974	
4.243	523,275	20	15	DEC 18,1974	
4.260	523,342	20	16	DEC 18,1974	
4,276	523.375	20	17	DEC 18,1974	
4,292	523,309	20	18	DEC 18,1974	
4.309	523,275	20	19	DEC 18,1974	
4,325	523.409	20	20	DEC 18,1974	
4,341	523.342	20	20	DEC 18,1974	
4.358	523.375	20	21	DEC 18,1974	
4,374	523,409	20	22	DEC 18,1974	
4.390	523,409	20	23	DEC 18,1974	
4.407	523.442	20	24	DEC 18,1974	
4,423	523,442	20	25	DEC 18,1974	
4,439	523,375	20	26	DEC 18,1974	
4.456	523,709	20	27	DEC 18,1974	
4.472	523,476	20	28	DEC 18,1974	
4,488	523,442	20	29	DEC 18,1974	
4.505	523,442	20	30	DEC 18,1974	
4,521	523,509	20	31	DEC 18,1974	
4,537	523,576	20	32	DEC 18,1974	
4.554	523.476	20	33	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.570	523.542	20	34	DEC 18,1974	
4.586	523.576	20	35	DEC 18,1974	
4.602	523.609	20	36	DEC 18,1974	
4.619	523.643	20	37	DEC 18,1974	
4.635	523.576	20	38	DEC 18,1974	
4.651	523.576	20	39	DEC 18,1974	
4.668	523.643	20	40	DEC 18,1974	
4.684	523.643	20	41	DEC 18,1974	
4.700	523.643	20	42	DEC 18,1974	
4.717	523.609	20	43	DEC 18,1974	
4.733	523.676	20	44	DEC 18,1974	
4.749	523.643	20	45	DEC 18,1974	
4.766	523.643	20	46	DEC 18,1974	
4.782	523.743	20	47	DEC 18,1974	
4.798	523.709	20	48	DEC 18,1974	
4.815	523.709	20	49	DEC 18,1974	
4.831	523.709	20	50	DEC 18,1974	
4.847	523.776	20	51	DEC 18,1974	
4.864	523.743	20	52	DEC 18,1974	
4.880	523.709	20	53	DEC 18,1974	
4.896	523.709	20	54	DEC 18,1974	
4.913	523.743	20	55	DEC 18,1974	
4.929	523.743	20	56	DEC 18,1974	
4.945	523.776	20	57	DEC 18,1974	
4.962	523.743	20	58	DEC 18,1974	
4.978	523.943	20	59	DEC 18,1974	
4.994	523.876	21	00	DEC 18,1974	2 G/M INJECTED
5.011	523.876	21	01	DEC 18,1974	DOWN D.P.
5.027	523.776	21	02	DEC 18,1974	
5.043	523.876	21	03	DEC 18,1974	
5.059	523.876	21	04	DEC 18,1974	
5.076	523.843	21	05	DEC 18,1974	
5.092	523.876	21	06	DEC 18,1974	
5.108	523.910	21	07	DEC 18,1974	
5.125	523.876	21	07	DEC 18,1974	
5.141	523.910	21	08	DEC 18,1974	
5.157	523.976	21	09	DEC 18,1974	
5.174	523.976	21	10	DEC 18,1974	
5.190	523.976	21	11	DEC 18,1974	
5.206	523.976	21	12	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO, 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5,223	524,043	21	13	DEC 18,1974	
5,239	524,043	21	14	DEC 18,1974	
5,255	524,043	21	15	DEC 18,1974	
5,272	524,010	21	16	DEC 18,1974	
5,288	524,010	21	17	DEC 18,1974	
5.304	524.043	21	18	DEC 18,1974	
5.321	524,077	21	19	DEC 18,1974	
5.337	524,043	21	20	DEC 18,1974	5 G/M INJECTED
5.353	524,043	21	21	DEC 18,1974	DOWN D.P.
5.370	524,143	21	22	DEC 18,1974	
5,386	524,110	21	23	DEC 18,1974	
5.402	524,110	21	24	DEC 18,1974	
5,419	524,077	21	25	DEC 18,1974	
5.435	524,110	21	26	DEC 18,1974	
5,451	524,077	21	27	DEC 18,1974	
5.467	524,143	21	28	DEC 18,1974	
5,484	524.143	21	29	DEC 18,1974	
5.500	524,177	21	30	DEC 18,1974	
5.516	524,210	21	31	DEC 18,1974	
5.533	524.210	21	32	DEC 18,1974	
5,549	524,143	21	33	DEC 18,1974	
5,565	524,210	21	34	DEC 18,1974	
5,582	524,210	21	35	DEC 18,1974	
5.598	524,143	21	36	DEC 18,1974	
5.614	524,143	21	37	DEC 18,1974	
5.631	524,177	21	38	DEC 18,1974	
5,647	524,310	21	39	DEC 18,1974	
5,663	524,244	21	40	DEC 18,1974	10 G/M INJECT
5,680	524,210	21	41	DEC 18,1974	DOWN D.P.
5,696	524,277	21	42	DEC 18,1974	
5.712	524,344	21	43	DEC 18,1974	
5,729	524,310	21	44	DEC 18,1974	
5,745	524,310	21	45	DEC 18,1974	
5,761	524,377	21	46	DEC 18,1974	
5,778	524,444	21	47	DEC 18,1974	
5.794	524,310	21	48	DEC 18,1974	
5,810	524,377	21	49	DEC 18,1974	
5,827	524,377	21	50	DEC 18,1974	
5.843	524,344	21	51	DEC 18,1974	
5,859	524,344	21	52	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO, 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5,876	524,344	21	53	DEC 18,1974	
5,892	524,410	21	54	DEC 18,1974	
5,908	524,410	21	54	DEC 18,1974	20 G/M INJECT
5,924	524,377	21	55	DEC 18,1974	D.P. OVERFLOW
5,941	524,444	21	56	DEC 18,1974	
5,957	524,477	21	57	DEC 18,1974	
5,973	524,477	21	58	DEC 18,1974	
5.990	524.477	21	59	DEC 18,1974	DECLINE
6.006	524,544	22	00	DEC 18,1974	
6,022	524,611	22	01	DEC 18,1974	
6,039	524,644	22	02	DEC 18,1974	
6,055	524,778	22	03	DEC 18,1974	
6.071	524,778	22	04	DEC 18,1974	
6.088	524,845	22	05	DEC 18,1974	
6,104	524,778	22	06	DEC 18,1974	
6,120	524,811	22	07	DEC 18,1974	
6.137	524.845	22	08	DEC 18,1974	
6,153	524,744	22	09	DEC 18,1974	
6,169	524.811	22	10	DEC 18,1974	
6,186	524,778	22	11	DEC 18,1974	
6,202	524,711	22	12	DEC 18,1974	
6,218	524,744	22	13	DEC 18,1974	
6,235	524,778	22	14	DEC 18,1974	
6,251	524,778	22	15	DEC 18,1974	
6,267	524,744	22	16	DEC 18,1974	
6,284	524,778	22	17	DEC 18,1974	
6,300	524,778	22	18	DEC 18,1974	
6,316	524,744	22	19	DEC 18,1974	
6,333	524,778	22	20	DEC 18,1974	
6,349	524,811	22	21	DEC 18,1974	
6,365	524,845	22	22	DEC 18,1974	
6,381	524,744	22	23	DEC 18,1974	
6,398	524,778	22	24	DEC 18,1974	
6,414	524,811	22	25	DEC 18,1974	
6,430	524,811	22	26	DEC 18,1974	
6,447	524,744	22	27	DEC 18,1974	
6,463	524,845	22	28	DEC 18,1974	
6,479	524,878	22	29	DEC 18,1974	
6,496	524,878	22	30	DEC 18,1974	20 G/M ANNULUS
6,512	524,811	22	31	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO. 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
6,528	525,245	22	32	DEC 18,1974	
6,545	526.213	22	33	DEC 18,1974	
6.561	526,814	22	34	DEC 18,1974	
6,577	527,349	22	35	DEC 18,1974	
6,594	527,916	22	36	DEC 18,1974	
6,610	528.217	22	37	DEC 18,1974	
6,626	528.617	22	38	DEC 18,1974	
6.643	528,818	22	39	DEC 18,1974	
6.659	529.118	22	40	DEC 18,1974	
6,675	529,385	22	41	DEC 18,1974	
6,692	529,452	22	41	DEC 18,1974	
6,708	529.652	22	42	DEC 18,1974	
6,724	529,819	22	43	DEC 18,1974	
6,741	529,853	22	44	DEC 18,1974	
6,757	530.020	22	45	DEC 18,1974	
6.773	530,053	22	46	DEC 18,1974	
6,789	530,120	22	47	DEC 18,1974	
6,806	530,220	22	48	DEC 18,1974	
6,822	530,320	22	49	DEC 18,1974	
6.838	530,621	22	50	DEC 18,1974	40 G/M ANNULUS
6,855	531,890	22	51	DEC 18,1974	
6.871	532,791	22	52	DEC 18,1974	
6,887	533,526	22	53	DEC 18,1974	
6,904	534,193	22	54	DEC 18,1974	
6,920	534,794	22	55	DEC 18,1974	
6,936	535,295	22	56	DEC 18,1974	
6,953	535,696	22	57	DEC 18,1974	
6,969	536,130	22	58	DEC 18,1974	
6,985	536,464	22	59	DEC 18,1974	
7,002	536,731	23	00	DEC 18,1974	
7.018	536,998	23	01	DEC 18,1974	
7,034	537,232	23	02	DEC 18,1974	
7,051	537,499	23	03	DEC 18,1974	
7,067	537,632	23	04	DEC 18,1974	
7.083	537,733	23	05	DEC 18,1974	
7,100	538,033	23	06	DEC 18,1974	
7.116	538,200	23	07	DEC 18,1974	
7,132	538,267	23	08	DEC 18,1974	
7,149	538,334	23	09	DEC 18,1974	
7,165	539,168	23	10	DEC 18,1974	60 G/M ANNULUS

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
222 DST NO, 27

DATE OF RUN
JANUARY 10, 1975

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7,181	540,303	23	11	DEC 18,1974	
7,198	541,138	23	12	DEC 18,1974	
7,214	542,374	23	13	DEC 18,1974	
7,230	542,874	23	14	DEC 18,1974	
7,246	543,509	23	15	DEC 18,1974	
7,263	544,010	23	16	DEC 18,1974	
7,279	544,444	23	17	DEC 18,1974	
7,295	545,011	23	18	DEC 18,1974	
7,312	545,278	23	19	DEC 18,1974	
7,328	545,612	23	20	DEC 18,1974	
7,344	545,946	23	21	DEC 18,1974	
7,361	546,280	23	22	DEC 18,1974	
7,377	546,581	23	23	DEC 18,1974	
7,393	546,747	23	24	DEC 18,1974	
7,410	546,948	23	25	DEC 18,1974	
7,426	547,182	23	26	DEC 18,1974	
7,442	547,348	23	27	DEC 18,1974	
7,459	547,382	23	28	DEC 18,1974	
7,475	547,582	23	28	DEC 18,1974	
7,491	546,781	23	29	DEC 18,1974	DECLINE
7,508	543,776	23	30	DEC 18,1974	
7,524	540,904	23	31	DEC 18,1974	
7,540	538,701	23	32	DEC 18,1974	
7,557	536,798	23	33	DEC 18,1974	
7,573	535,228	23	34	DEC 18,1974	
7,589	533,826	23	35	DEC 18,1974	
7,606	532,557	23	36	DEC 18,1974	
7,622	531,689	23	37	DEC 18,1974	
7,638	530,921	23	38	DEC 18,1974	
7,654	530,287	23	39	DEC 18,1974	
7,671	529,552	23	40	DEC 18,1974	
7,687	529,118	23	41	DEC 18,1974	
7,703	528,718	23	42	DEC 18,1974	
7,720	528,284	23	43	DEC 18,1974	
7,736	528,016	23	44	DEC 18,1974	
7,752	527,749	23	45	DEC 18,1974	
7,769	527,516	23	46	DEC 18,1974	
7,785	527,315	23	47	DEC 18,1974	
7,801	527,048	23	48	DEC 18,1974	
7,818	526,948	23	49	DEC 18,1974	

```
JOB NUMBER                                                          DATE OF JOB
SPG 11210 Y                                                   DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                    DATE OF RUN
222   DST NO, 27                                               JANUARY 10, 1975

                                  SPERRY-SUN
                   PRECISION SUBSURFACE PRESSURE GAUGE REPORT

    DELTA   PRESSURE                TIME     DATE             COMMENTS
    TIME     (PSI)                 HR MIN

    7,834    526,748               23   50 DEC 18,1974
    7,850    526,648               23   51 DEC 18,1974
    7,867    526,547               23   52 DEC 18,1974   END OF TEST
```

```
                         483 POINTS REPORTED THIS RUN

                                  PAGE 15
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG 17
FIELD/LEASE	TRACT C-B SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 193 WITH 1400 LB. ELEMENT.

GAUGE LOCATED INSIDE D.P. BELOW PACKER.

DEPTH OF GAUGE IS 1732 FT.

TEST INTERVAL 1711 TO 1770 FT.

SET PACKER DEPTH 1711 FT.

INITIAL HYDROSTATIC IS 551 PSI

FINAL HYDROSTATIC IS 555 PSI

GROUND LEVEL REFERENCE IS 7036 FT.

514 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                        DATE OF JOB
SPG 11210 Y                                                 DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                  DATE OF RUN
193   DST NO, 27                                            JANUARY 10, 1975

                             SPERRY-SUN
               PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE              TIME     DATE                COMMENTS
   TIME      (PSI)               HR MIN

   0.000      50.421              15  24 DEC 18,1974   INITIAL
    .017      71.056              15  25 DEC 18,1974   SHUT-IN
    .033     361.760              15  26 DEC 18,1974
    .050     499.604              15  27 DEC 18,1974
    .067     515.168              15  28 DEC 18,1974
    .083     536.254              15  29 DEC 18,1974
    .100     543.942              15  30 DEC 18,1974
    .117     548.774              15  31 DEC 18,1974
    .133     551.724              15  32 DEC 18,1974
    .150     553.701              15  33 DEC 18,1974
    .167     555.426              15  34 DEC 18,1974
    .183     557.544              15  35 DEC 18,1974
    .200     558.329              15  36 DEC 18,1974
    .217     559.082              15  37 DEC 18,1974
    .233     559.678              15  38 DEC 18,1974
    .250     560.180              15  39 DEC 18,1974
    .267     560.494              15  40 DEC 18,1974
    .283     560.933              15  41 DEC 18,1974
    .300     561.278              15  42 DEC 18,1974
    .317     561.655              15  43 DEC 18,1974
    .333     562.000              15  44 DEC 18,1974
    .350     562.283              15  45 DEC 18,1974
    .367     562.534              15  46 DEC 18,1974
    .383     562.753              15  47 DEC 18,1974
    .400     562.973              15  48 DEC 18,1974
    .417     563.130              15  49 DEC 18,1974
    .433     563.381              15  50 DEC 18,1974
    .450     563.538              15  51 DEC 18,1974
    .467     563.726              15  52 DEC 18,1974
    .483     563.883              15  53 DEC 18,1974
    .500     564.040              15  54 DEC 18,1974   END SHUT-IN
```

```
31 POINTS REPORTED THIS RUN

PAGE  2
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO, 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0.000	52.930	16	00	DEC 18,1974	START FLOW
.016	60.488	16	01	DEC 18,1974	
.033	79.618	16	02	DEC 18,1974	
.049	104.486	16	03	DEC 18,1974	
.065	188.768	16	04	DEC 18,1974	
.082	199.258	16	05	DEC 18,1974	
.098	209.011	16	06	DEC 18,1974	
.114	216.008	16	07	DEC 18,1974	
.131	225.421	16	08	DEC 18,1974	
.147	234.521	16	09	DEC 18,1974	
.163	243.213	16	10	DEC 18,1974	
.180	251.747	16	11	DEC 18,1974	
.196	259.812	16	12	DEC 18,1974	
.212	267.515	16	13	DEC 18,1974	
.228	275.297	16	14	DEC 18,1974	
.245	282.859	16	15	DEC 18,1974	
.261	290.390	16	16	DEC 18,1974	
.277	297.858	16	17	DEC 18,1974	
.294	305.138	16	18	DEC 18,1974	
.310	312.072	16	19	DEC 18,1974	
.326	318.756	16	20	DEC 18,1974	
.343	325.377	16	21	DEC 18,1974	
.359	330.021	16	22	DEC 18,1974	
.375	336.171	16	23	DEC 18,1974	
.392	341.929	16	24	DEC 18,1974	
.408	347.828	16	24	DEC 18,1974	
.424	353.664	16	25	DEC 18,1974	
.441	359.438	16	26	DEC 18,1974	
.457	364.992	16	27	DEC 18,1974	
.473	370.577	16	28	DEC 18,1974	
.490	376.162	16	29	DEC 18,1974	
.506	381.465	16	30	DEC 18,1974	
.522	386.611	16	31	DEC 18,1974	
.539	391.381	16	32	DEC 18,1974	
.555	396.088	16	33	DEC 18,1974	
.571	400.763	16	34	DEC 18,1974	
.588	403.430	16	35	DEC 18,1974	
.604	409.612	16	36	DEC 18,1974	
.620	413.926	16	37	DEC 18,1974	
.637	418.162	16	38	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
.653	422.335	16	39	DEC 18,1974	
.669	426.603	16	40	DEC 18,1974	
.685	430.557	16	41	DEC 18,1974	
.702	434.447	16	42	DEC 18,1974	
.718	438.370	16	43	DEC 18,1974	
.734	442.104	16	44	DEC 18,1974	
.751	445.681	16	45	DEC 18,1974	
.767	449.195	16	46	DEC 18,1974	
.783	452.710	16	47	DEC 18,1974	
.800	456.004	16	48	DEC 18,1974	
.816	459.111	16	49	DEC 18,1974	
.832	462.280	16	50	DEC 18,1974	
.849	465.324	16	51	DEC 18,1974	
.865	467.552	16	52	DEC 18,1974	
.881	470.501	16	53	DEC 18,1974	
.898	473.262	16	54	DEC 18,1974	
.914	476.024	16	55	DEC 18,1974	
.930	478.722	16	56	DEC 18,1974	
.947	481.295	16	57	DEC 18,1974	
.963	485.955	16	58	DEC 18,1974	
.979	485.955	16	59	DEC 18,1974	
.996	488.340	17	00	DEC 18,1974	
1.012	490.630	17	01	DEC 18,1974	
1.028	492.921	17	02	DEC 18,1974	
1.045	495.055	17	03	DEC 18,1974	
1.061	497.251	17	04	DEC 18,1974	
1.077	499.385	17	05	DEC 18,1974	
1.093	501.362	17	06	DEC 18,1974	
1.110	503.433	17	07	DEC 18,1974	
1.126	505.373	17	08	DEC 18,1974	
1.142	507.292	17	09	DEC 18,1974	
1.159	509.269	17	10	DEC 18,1974	
1.175	510.932	17	11	DEC 18,1974	
1.191	512.721	17	11	DEC 18,1974	
1.208	514.415	17	12	DEC 18,1974	
1.224	516.078	17	13	DEC 18,1974	
1.240	517.553	17	14	DEC 18,1974	
1.257	519.059	17	15	DEC 18,1974	
1.273	520.471	17	16	DEC 18,1974	
1.289	521.820	17	17	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.306	523.232	17	18	DEC 18,1974	
1.322	524.487	17	19	DEC 18,1974	
1.338	525.774	17	20	DEC 18,1974	
1.355	526.998	17	21	DEC 18,1974	
1.371	528.159	17	22	DEC 18,1974	
1.387	529.288	17	23	DEC 18,1974	
1.404	530.449	17	24	DEC 18,1974	
1.420	531.642	17	25	DEC 18,1974	
1.436	532.709	17	26	DEC 18,1974	
1.453	533.681	17	27	DEC 18,1974	
1.469	534.717	17	28	DEC 18,1974	
1.485	535.689	17	29	DEC 18,1974	
1.502	536.662	17	30	DEC 18,1974	
1.518	537.509	17	31	DEC 18,1974	
1.534	538.388	17	32	DEC 18,1974	
1.550	539.235	17	33	DEC 18,1974	
1.567	540.051	17	34	DEC 18,1974	
1.583	540.804	17	35	DEC 18,1974	
1.599	541.651	17	36	DEC 18,1974	
1.616	542.153	17	37	DEC 18,1974	
1.632	542.938	17	38	DEC 18,1974	
1.648	543.628	17	39	DEC 18,1974	
1.665	544.350	17	40	DEC 18,1974	
1.681	545.040	17	41	DEC 18,1974	
1.697	545.699	17	42	DEC 18,1974	
1.714	546.295	17	43	DEC 18,1974	
1.730	546.860	17	44	DEC 18,1974	
1.746	547.331	17	45	DEC 18,1974	
1.763	547.864	17	46	DEC 18,1974	
1.779	548.429	17	47	DEC 18,1974	
1.795	548.931	17	48	DEC 18,1974	
1.812	549.433	17	49	DEC 18,1974	
1.828	549.904	17	50	DEC 18,1974	
1.844	550.375	17	51	DEC 18,1974	
1.861	550.845	17	52	DEC 18,1974	
1.877	551.222	17	53	DEC 18,1974	
1.893	551.692	17	54	DEC 18,1974	
1.910	552.132	17	55	DEC 18,1974	
1.926	552.540	17	56	DEC 18,1974	
1.942	552.759	17	57	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1.959	553.230	17	58	DEC 18,1974	
1.975	553.638	17	58	DEC 18,1974	
1.991	553.826	17	59	DEC 18,1974	
2.007	554.234	18	00	DEC 18,1974	
2.024	554.611	18	01	DEC 18,1974	
2.040	554.956	18	02	DEC 18,1974	
2.056	555.332	18	03	DEC 18,1974	
2.073	555.615	18	04	DEC 18,1974	
2.089	555.897	18	05	DEC 18,1974	
2.105	556.556	18	06	DEC 18,1974	
2.122	556.634	18	07	DEC 18,1974	
2.138	556.917	18	08	DEC 18,1974	
2.154	557.199	18	09	DEC 18,1974	
2.171	557.513	18	10	DEC 18,1974	
2.187	557.701	18	11	DEC 18,1974	
2.203	557.984	18	12	DEC 18,1974	
2.220	558.203	18	13	DEC 18,1974	
2.236	558.454	18	14	DEC 18,1974	
2.252	558.674	18	15	DEC 18,1974	
2.269	558.925	18	16	DEC 18,1974	
2.285	559.113	18	17	DEC 18,1974	
2.301	559.333	18	18	DEC 18,1974	
2.318	559.490	18	19	DEC 18,1974	
2.334	559.678	18	20	DEC 18,1974	
2.350	559.804	18	21	DEC 18,1974	
2.367	560.120	18	22	DEC 18,1974	
2.383	560.639	18	23	DEC 18,1974	
2.399	561.467	18	24	DEC 18,1974	
2.415	561.969	18	25	DEC 18,1974	
2.432	562.09-	18	26	DEC 18,1974	
2.448	559.865	18	27	DEC 18,1974	
2.464	562.753	18	28	DEC 18,1974	
2.481	563.255	18	29	DEC 18,1974	
2.497	563.725	18	30	DEC 18,1974	
2.513	564.165	18	31	DEC 18,1974	
2.530	564.887	18	32	DEC 18,1974	
2.546	565.452	18	33	DEC 18,1974	
2.562	564.981	18	34	DEC 18,1974	
2.579	565.339	18	35	DEC 18,1974	
2.595	565.358	18	36	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.611	565.264	18	37	DEC 18,1974	
2.628	565.609	18	38	DEC 18,1974	
2.644	565.609	18	39	DEC 18,1974	
2.660	565.577	18	40	DEC 18,1974	
2.677	565.546	18	41	DEC 18,1974	
2.693	565.546	18	42	DEC 18,1974	
2.709	565.515	18	43	DEC 18,1974	
2.726	565.515	18	44	DEC 18,1974	
2.742	565.515	18	45	DEC 18,1974	
2.758	591.307	18	45	DEC 18,1974	START JETTING
2.775	595.544	18	46	DEC 18,1974	
2.791	552.289	18	47	DEC 18,1974	
2.807	515.388	18	48	DEC 18,1974	
2.824	505.660	18	49	DEC 18,1974	
2.840	501.958	18	50	DEC 18,1974	
2.856	500.577	18	51	DEC 18,1974	
2.872	500.420	18	52	DEC 18,1974	
2.889	500.263	18	53	DEC 18,1974	
2.905	500.012	18	54	DEC 18,1974	
2.921	499.856	18	55	DEC 18,1974	
2.938	499.510	18	56	DEC 18,1974	
2.954	499.416	18	57	DEC 18,1974	
2.970	499.385	18	58	DEC 18,1974	
2.987	499.102	18	59	DEC 18,1974	
3.003	499.040	19	00	DEC 18,1974	
3.019	498.977	19	01	DEC 18,1974	
3.035	499.008	19	02	DEC 18,1974	
3.052	498.977	19	03	DEC 18,1974	
3.068	498.914	19	04	DEC 18,1974	
3.085	498.883	19	05	DEC 18,1974	
3.101	498.883	19	06	DEC 18,1974	
3.117	498.789	19	07	DEC 18,1974	
3.134	498.726	19	08	DEC 18,1974	
3.150	498.663	19	09	DEC 18,1974	
3.166	498.695	19	10	DEC 18,1974	
3.183	498.757	19	11	DEC 18,1974	
3.199	498.632	19	12	DEC 18,1974	
3.215	498.538	19	13	DEC 18,1974	
3.232	498.443	19	14	DEC 18,1974	
3.248	498.475	19	15	DEC 18,1974	

```
JOB NUMBER                                                                    DATE OF JOB
SPG 11210 Y                                                            DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                              DATE OF RUN
193  DST NO, 27                                                                   1-10-75

                                       SPERRY-SUN
                        PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA    PRESSURE                          TIME      DATE               COMMENTS
      TIME      (PSI)                           HR MIN

      3.264     498.412                         19   16 DEC 18,1974
      3.280     498.381                         19   17 DEC 18,1974
      3.297     498.192                         19   18 DEC 18,1974
      3.313     498.381                         19   19 DEC 18,1974
      3.329     498.255                         19   20 DEC 18,1974
      3.346     498.192                         19   21 DEC 18,1974
      3.362     498.130                         19   22 DEC 18,1974
      3.378     498.224                         19   23 DEC 18,1974
      3.395     498.161                         19   24 DEC 18,1974
      3.411     498.130                         19   25 DEC 18,1974
      3.427     498.192                         19   26 DEC 18,1974
      3.444     498.161                         19   27 DEC 18,1974
      3.460     498.067                         19   28 DEC 18,1974
      3.476     498.036                         19   29 DEC 18,1974
      3.493     497.941                         19   30 DEC 18,1974
      3.509     497.941                         19   31 DEC 18,1974
      3.525     497.910                         19   32 DEC 18,1974
      3.542     497.816                         19   32 DEC 18,1974
      3.558     496.247                         19   33 DEC 18,1974
      3.574     495.400                         19   34 DEC 18,1974
      3.591     495.588                         19   35 DEC 18,1974
      3.607     495.714                         19   36 DEC 18,1974
      3.623     495.651                         19   37 DEC 18,1974
      3.640     495.714                         19   38 DEC 18,1974
      3.656     495.714                         19   39 DEC 18,1974
      3.672     495.651                         19   40 DEC 18,1974
      3.689     495.651                         19   41 DEC 18,1974
      3.705     495.588                         19   42 DEC 18,1974
      3.721     495.619                         19   43 DEC 18,1974
      3.737     495.588                         19   44 DEC 18,1974
      3.754     495.557                         19   45 DEC 18,1974
      3.770     495.651                         19   46 DEC 18,1974   END JETTING
      3.786     481.201                         19   47 DEC 18,1974
      3.803     464.696                         19   48 DEC 18,1974
      3.819     469.811                         19   49 DEC 18,1974
      3.835     475.051                         19   50 DEC 18,1974
      3.852     479.318                         19   51 DEC 18,1974
      3.868     482.958                         19   52 DEC 18,1974
      3.884     486.112                         19   53 DEC 18,1974
      3.901     489.438                         19   54 DEC 18,1974
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
3.917	492.607	19	55	DEC 18,1974	
3.933	495.525	19	56	DEC 18,1974	
3.950	498.287	19	57	DEC 18,1974	
3.966	500.452	19	58	DEC 18,1974	
3.982	502.899	19	59	DEC 18,1974	
3.999	505.472	20	00	DEC 18,1974	
4.015	507.857	20	01	DEC 18,1974	
4.031	510.242	20	02	DEC 18,1974	
4.048	512.470	20	03	DEC 18,1974	
4.064	514.635	20	04	DEC 18,1974	
4.080	516.674	20	05	DEC 18,1974	
4.097	518.055	20	06	DEC 18,1974	
4.113	519.310	20	07	DEC 18,1974	
4.129	521.350	20	08	DEC 18,1974	
4.146	522.228	20	09	DEC 18,1974	
4.162	523.358	20	10	DEC 18,1974	
4.178	524.425	20	11	DEC 18,1974	
4.194	526.119	20	12	DEC 18,1974	
4.211	527.123	20	13	DEC 18,1974	
4.227	528.221	20	14	DEC 18,1974	
4.243	529.633	20	15	DEC 18,1974	
4.260	530.732	20	16	DEC 18,1974	
4.276	532.018	20	17	DEC 18,1974	
4.292	533.305	20	18	DEC 18,1974	
4.309	534.560	20	19	DEC 18,1974	
4.325	535.689	20	20	DEC 18,1974	
4.341	536.650	20	20	DEC 18,1974	
4.358	537.695	20	21	DEC 18,1974	
4.374	538.795	20	22	DEC 18,1974	
4.390	539.769	20	23	DEC 18,1974	
4.407	540.773	20	24	DEC 18,1974	
4.423	541.589	20	25	DEC 18,1974	
4.439	542.593	20	26	DEC 18,1974	
4.455	543.409	20	27	DEC 18,1974	
4.472	544.350	20	28	DEC 18,1974	
4.488	545.260	20	29	DEC 18,1974	
4.505	546.013	20	30	DEC 18,1974	
4.521	546.766	20	31	DEC 18,1974	
4.537	547.438	20	32	DEC 18,1974	
4.554	548.178	20	33	DEC 18,1974	

JOB NUMBER
SPG 11210 Y

DATE OF JO
DECEMBER 18, 197

GAUGE/RUN NUMBER
193 DST NO. 27

DATE OF RU
1-10-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4.570	548.900	20	34	DEC 18,1974	
4.586	549.496	20	35	DEC 18,1974	
4.602	550.249	20	36	DEC 18,1974	
4.619	550.845	20	37	DEC 18,1974	
4.635	551.410	20	38	DEC 18,1974	
4.651	551.943	20	39	DEC 18,1974	
4.668	552.445	20	40	DEC 18,1974	
4.684	552.948	20	41	DEC 18,1974	
4.700	553.450	20	42	DEC 18,1974	
4.717	554.077	20	43	DEC 18,1974	
4.733	554.579	20	44	DEC 18,1974	
4.749	554.956	20	45	DEC 18,1974	
4.766	555.458	20	46	DEC 18,1974	
4.782	555.960	20	47	DEC 18,1974	
4.798	556.431	20	48	DEC 18,1974	
4.815	556.603	20	49	DEC 18,1974	
4.831	556.948	20	50	DEC 18,1974	
4.847	557.356	20	51	DEC 18,1974	
4.864	557.733	20	52	DEC 18,1974	
4.880	558.047	20	53	DEC 18,1974	
4.896	558.360	20	54	DEC 18,1974	
4.913	558.611	20	55	DEC 18,1974	
4.929	559.051	20	56	DEC 18,1974	
4.945	559.333	20	57	DEC 18,1974	
4.962	559.521	20	58	DEC 18,1974	
4.978	559.741	20	59	DEC 18,1974	
4.994	560.023	21	00	DEC 18,1974	2 GPM INJECTED
5.011	560.274	21	01	DEC 18,1974	DOWN DP
5.027	560.49[illegible]	21	02	DEC 18,1974	
5.043	560.743	21	03	DEC 18,1974	
5.059	560.965	21	04	DEC 18,1974	
5.076	561.184	21	05	DEC 18,1974	
5.092	561.843	21	06	DEC 18,1974	
5.108	562.816	21	07	DEC 18,1974	
5.125	563.852	21	07	DEC 18,1974	
5.141	564.856	21	08	DEC 18,1974	
5.157	565.797	21	09	DEC 18,1974	
5.174	566.738	21	10	DEC 18,1974	
5.190	567.680	21	11	DEC 18,1974	
5.206	568.433	21	12	DEC 18,1974	

```
JOB NUMBER                                                        DATE OF JOB
SPG 11210 Y                                                 DECEMBER 18, 1974

GAUGE/RUN NUMBER                                                  DATE OF RUN
193  DST NO. 27                                                       1-10-75

                                  SPERRY-SUN
                 PRECISION SUBSURFACE PRESSURE GAUGE REPORT


   DELTA     PRESSURE                      TIME      DATE             COMMENTS
   TIME       (PSI)                      HR MIN

   5.223     569.154                     21  13 DEC 18,1974
   5.239     570.002                     21  14 DEC 18,1974
   5.255     570.692                     21  15 DEC 18,1974
   5.272     571.320                     21  16 DEC 18,1974
   5.288     572.041                     21  17 DEC 18,1974
   5.304     572.355                     21  18 DEC 18,1974
   5.321     572.637                     21  19 DEC 18,1974
   5.337     572.826                     21  20 DEC 18,1974  5 GPM INJECTED
   5.353     573.202                     21  21 DEC 18,1974  DOWN DP
   5.370     573.673                     21  22 DEC 18,1974
   5.386     577.313                     21  23 DEC 18,1974
   5.402     582.051                     21  24 DEC 18,1974
   5.419     586.538                     21  25 DEC 18,1974
   5.435     590.743                     21  26 DEC 18,1974
   5.451     594.634                     21  27 DEC 18,1974
   5.467     598.430                     21  28 DEC 18,1974
   5.484     601.851                     21  29 DEC 18,1974
   5.500     605.114                     21  30 DEC 18,1974
   5.516     608.754                     21  31 DEC 18,1974
   5.533     612.463                     21  32 DEC 18,1974
   5.549     615.551                     21  33 DEC 18,1974
   5.565     618.515                     21  34 DEC 18,1974
   5.582     621.416                     21  35 DEC 18,1974
   5.598     624.099                     21  36 DEC 18,1974
   5.614     627.094                     21  37 DEC 18,1974
   5.631     632.036                     21  38 DEC 18,1974
   5.647     634.503                     21  39 DEC 18,1974
   5.663     637.154                     21  40 DEC 18,1974  10 GPM INJECTED
   5.680     644.642                     21  41 DEC 18,1974  DOWN DP
   5.696     653.155                     21  42 DEC 18,1974
   5.712     662.985                     21  43 DEC 18,1974
   5.729     671.406                     21  44 DEC 18,1974
   5.745     679.301                     21  45 DEC 18,1974
   5.761     688.753                     21  46 DEC 18,1974
   5.778     700.577                     21  47 DEC 18,1974
   5.794     710.135                     21  48 DEC 18,1974
   5.810     717.657                     21  49 DEC 18,1974
   5.827     724.364                     21  50 DEC 18,1974
   5.843     731.445                     21  51 DEC 18,1974
   5.859     736.343                     21  52 DEC 18,1974
```

JOB NUMBER
SPG 11210 Y

DATE OF JOB
DECEMBER 18, 1974

GAUGE/RUN NUMBER
193 DST NO, 27

DATE OF RUN
1-10-75

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5.876	742.395	21	53	DEC 18,1974	
5.892	748.135	21	54	DEC 18,1974	
5.908	749.102	21	54	DEC 18,1974	20 GPM INJECT
5.924	749.477	21	55	DEC 18,1974	DP OVERFLOW
5.941	749.664	21	56	DEC 18,1974	
5.957	750.225	21	57	DEC 18,1974	
5.973	750.444	21	58	DEC 18,1974	
5.990	745.265	21	59	DEC 18,1974	DECLINE
6.006	740.024	22	00	DEC 18,1974	
6.022	734.752	22	01	DEC 18,1974	
6.039	729.636	22	02	DEC 18,1974	
6.055	724.769	22	03	DEC 18,1974	
6.071	720.246	22	04	DEC 18,1974	
6.088	715.847	22	05	DEC 18,1974	
6.104	711.448	22	06	DEC 18,1974	
6.120	707.237	22	07	DEC 18,1974	
6.137	703.275	22	08	DEC 18,1974	
6.153	699.547	22	09	DEC 18,1974	
6.169	695.928	22	10	DEC 18,1974	
6.186	692.372	22	11	DEC 18,1974	
6.202	688.784	22	12	DEC 18,1974	
6.218	688.379	22	13	DEC 18,1974	
6.235	681.890	22	14	DEC 18,1974	
6.251	678.708	22	15	DEC 18,1974	
6.267	675.432	22	16	DEC 18,1974	
6.284	672.344	22	17	DEC 18,1974	
6.300	669.255	22	18	DEC 18,1974	
6.316	666.448	22	19	DEC 18,1974	
6.333	663.575	22	20	DEC 18,1974	
6.349	660.739	22	21	DEC 18,1974	
6.365	657.835	22	22	DEC 18,1974	
6.381	655.217	22	23	DEC 18,1974	
6.398	652.815	22	24	DEC 18,1974	
6.414	650.332	22	25	DEC 18,1974	
6.430	648.104	22	26	DEC 18,1974	
6.447	646.077	22	27	DEC 18,1974	
6.463	643.924	22	28	DEC 18,1974	
6.479	641.596	22	29	DEC 18,1974	
6.496	639.858	22	30	DEC 18,1974	20 GPM ANNULUS
6.512	637.872	22	31	DEC 18,1974	

```
JOB NUMBER                                                     DATE OF JOB
SPG 11210 Y                                               DECEMBER 18, 1974

GAUGE/RUN NUMBER                                               DATE OF RUN
193  DST NO. 27                                                    1-10-75

                              SPERRY-SUN
                PRECISION SUBSURFACE PRESSURE GAUGE REPORT

  DELTA    PRESSURE                   TIME      DATE              COMMENTS
  TIME      (PSI)                    HR MIN

  6.528    635.907                   22  32 DEC 18,1974
  6.545    633.972                   22  33 DEC 18,1974
  6.561    632.225                   22  34 DEC 18,1974
  6.577    630.385                   22  35 DEC 18,1974
  6.594    628.841                   22  36 DEC 18,1974
  6.610    627.187                   22  37 DEC 18,1974
  6.626    625.596                   22  38 DEC 18,1974
  6.643    623.943                   22  39 DEC 18,1974
  6.659    622.383                   22  40 DEC 18,1974
  6.675    620.948                   22  41 DEC 18,1974
  6.692    619.575                   22  41 DEC 18,1974
  6.708    618.171                   22  42 DEC 18,1974
  6.724    616.799                   22  43 DEC 18,1974
  6.741    615.582                   22  44 DEC 18,1974
  6.757    614.334                   22  45 DEC 18,1974
  6.773    613.149                   22  46 DEC 18,1974
  6.789    611.995                   22  47 DEC 18,1974
  6.806    610.668                   22  48 DEC 18,1974
  6.822    609.507                   22  49 DEC 18,1974
  6.838    608.566                   22  50 DEC 18,1974   40 GPM ANNULUS
  6.855    607.436                   22  51 DEC 18,1974
  6.871    606.463                   22  52 DEC 18,1974
  6.887    605.585                   22  53 DEC 18,1974
  6.904    604.737                   22  54 DEC 18,1974
  6.920    603.765                   22  55 DEC 18,1974
  6.936    602.917                   22  56 DEC 18,1974
  6.953    602.039                   22  57 DEC 18,1974
  6.969    601.223                   22  58 DEC 18,1974
  6.985    600.501                   22  59 DEC 18,1974
  7.002    599.854                   23  00 DEC 18,1974
  7.018    598.901                   23  01 DEC 18,1974
  7.034    598.211                   23  02 DEC 18,1974
  7.051    597.489                   23  03 DEC 18,1974
  7.067    596.861                   23  04 DEC 18,1974
  7.083    596.140                   23  05 DEC 18,1974
  7.100    595.575                   23  06 DEC 18,1974
  7.116    594.927                   23  07 DEC 18,1974
  7.132    594.320                   23  08 DEC 18,1974
  7.149    593.755                   23  09 DEC 18,1974
  7.165    593.222                   23  10 DEC 18,1974   60 GPM ANNULUS
```

JOB NUMBER
SPG 11210 Y

DATE OF JO
DECEMBER 18, 197

GAUGE/RUN NUMBER
193 DST NO, 27

DATE OF RU
1-10-7

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.181	592.751	23	11	DEC 18,1974	
7.198	592.249	23	12	DEC 18,1974	
7.214	591.684	23	13	DEC 18,1974	
7.230	591.213	23	14	DEC 18,1974	
7.246	590.837	23	15	DEC 18,1974	
7.263	590.335	23	16	DEC 18,1974	
7.279	589.864	23	17	DEC 18,1974	
7.295	589.456	23	18	DEC 18,1974	
7.312	589.048	23	19	DEC 18,1974	
7.328	588.672	23	20	DEC 18,1974	
7.344	588.232	23	21	DEC 18,1974	
7.361	587.919	23	22	DEC 18,1974	
7.377	587.511	23	23	DEC 18,1974	
7.393	587.166	23	24	DEC 18,1974	
7.410	586.789	23	25	DEC 18,1974	
7.426	586.475	23	26	DEC 18,1974	
7.442	586.287	23	27	DEC 18,1974	
7.459	585.942	23	28	DEC 18,1974	
7.475	585.628	23	28	DEC 18,1974	
7.491	585.346	23	29	DEC 18,1974	DECLINE
7.508	585.126	23	30	DEC 18,1974	
7.524	584.844	23	31	DEC 18,1974	
7.540	584.561	23	32	DEC 18,1974	
7.557	584.342	23	33	DEC 18,1974	
7.573	584.122	23	34	DEC 18,1974	
7.589	583.902	23	35	DEC 18,1974	
7.606	583.651	23	36	DEC 18,1974	
7.622	583.455	23	37	DEC 18,1974	
7.638	583.212	23	38	DEC 18,1974	
7.654	582.961	23	39	DEC 18,1974	
7.671	582.721	23	40	DEC 18,1974	
7.687	582.584	23	41	DEC 18,1974	
7.703	582.459	23	42	DEC 18,1974	
7.720	582.208	23	43	DEC 18,1974	
7.736	582.082	23	44	DEC 18,1974	
7.752	581.925	23	45	DEC 18,1974	
7.769	581.800	23	46	DEC 18,1974	
7.785	581.612	23	47	DEC 18,1974	
7.801	581.436	23	48	DEC 18,1974	
7.818	581.351	23	49	DEC 18,1974	

```
JOB NUMBER                                                   DATE OF JOB
SPG 11210 Y                                            DECEMBER 18, 1974

GAUGE/RUN NUMBER                                             DATE OF RUN
193  DST NO, 27                                                  1-10-75

                              SPERRY-SUN
              PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA   PRESSURE                 TIME     DATE            COMMENTS
   TIME     (PSI)                  HR MIN

   7.834    581.392                23  50 DEC 18,1974
   7.850    581.172                23  51 DEC 18,1974
   7.867    581.015                23  52 DEC 18,1974   END OF TEST
```

```
                      483 POINTS REPORTED THIS RUN
```

JOHNSTON
Schlumberger

technical report

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S. G. #17
TEST NO. 28
COUNTY RIO BLANCO
STATE COLORADO

RECEIVED
JAN 2 1975
A. J. ROGERS

II B-1255

F.R. #09112 C

COMPANY ATLANTIC-RICHFIELD COMPANY
WELL FEDERAL S. G. #17
TEST NO. 28
COUNTY RIO BLANCO
STATE COLORADO

PAGE 1

JOHNSTON
...found a better way

SURFACE INFORMATION

iption (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool (12-19-74)	2331	-	-
CLOSED FOR INITIAL SHUT-IN	2333	-	-
(12-20-74)			
FINISHED SHUT-IN	0003	-	-
RE-OPENED TOOL	0006	-	-
STARTED INJECTION AT			
2 GAL/MIN.	0510	-	-
INCREASED INJECTION TO			
5 GAL/MIN.	0530	-	-
INCREASED INJECTION TO			
11 GAL/MIN.	0550	-	-
INCREASED INJECTION TO			
20 GAL/MIN.	0610	-	-
STOPPED INJECTIONS	0612	-	-
CLOSED TOOL	0816	-	-
PULLED PACKER LOOSE	0818	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 3/4"

MUD DATA

Mud Type WATER - FOAM Wt. -
Viscosity - Water Loss - C.C.
Resist: of Mud - @ - °F; of Filtrate - @ - °F
Chloride Content - PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested GREEN RIVER
Elevation 7036' Ft.
Net Productive Interval 52 Ft.
Estimated Porosity - %
All Depths Measured From GROUND LEVEL
Total Depth 1820 Ft.
Main Hole/Casing Size 6 3/4"
Rat Hole/Liner Size -
Drill Collar Length 298' I.D. -
Drill Pipe Length 1436' I.D. -
Packer Depth(s) 1764' & 1768' Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure ______ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas ______
cc. Oil ______
cc. Water ______
cc. Mud ______
Tot. Liquid cc. ______
Gravity ______ °API @ ______ °F.
Gas/Oil Ratio ______ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: ______

Address 1500 SECURITY LIFE BUILDING, 1600 GLENARM; DENVER, COLORADO 80202
pany ATLANTIC-RICHFIELD COMPANY Field SORGHUM GULCH
Well FEDERAL S. G. #17 Location 436' FWL & 181' FSL SEC. 16-3S-96W
Test Interval 1768' TO 1820' Test # 28 Date 12-19-74
County RIO BLANCO State COLORADO II B-1256
Technician TAYLOR (VERNAL) Test Approved By MR. D. B. TAIT
Field Report No. 09112 C
No. Reports Requested 14 (13x)

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)	2800		
Instrument Depth	1770'		
Instrument Opening	OUTSIDE		
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.	–		
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09112 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

INSTRUMENT NUMBER 4633 N; CLOCK STOPPED, NO PRESSURES RECORDED.

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel 0.003451 inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
1	600.8		30	610.7		62	516.2	
2	612.1		31	610.7		63	523.3	
3 0	111.4		32	610.7		64	528.9	
1	132.6		33	610.7		65	534.6	
4 2	141.1		5 34	612.1		66	538.8	
3	376.6		35	614.9		67	544.4	
4	468.3		6 36	614.9		68	548.7	
5	524.7		7 37	200.3		69	552.9	
6	558.5		38	244.0		70	555.7	
7	575.4		39	259.5		71	559.9	
8	585.3		40	282.1		72	562.8	
9	592.4		41	299.0		73	565.7	
10	596.6		42	313.1		74	568.4	
11	599.4		43	330.0		75	571.2	
12	600.8		44	342.7		76	574.0	
13	603.7		45	360.0		77	576.9	
14	605.1		46	370.9		78	578.3	
15	605.1		47	385.1		79	581.1	
16	606.5		48	394.9		80	582.5	
17	606.5		49	407.6		81	583.9	
18	607.9		50	418.9		82	585.3	
19	607.9		51	428.8		83	586.7	
20	609.3		52	440.1		84	588.2	
21	609.3		53	447.1		85	590.9	
22	609.3		54	456.9		86	590.9	
23	609.3		55	464.0		87	592.4	
24	610.7		56	475.3		88	592.4	
25	610.7		57	483.8		89	593.8	
26	610.7		58	492.2		90	595.2	
27	610.7		59	497.9		92	598.0	
28	610.7		60	504.9		94	599.4	
29	610.7		61	510.6		96	600.8	

II B-1257

JOHNSTON
...found a better way

PRESSURE DATA

Instrument No.	32342 N		
Capacity (P.S.I.G.)			
Instrument Depth			
Instrument Opening			
Pressure Gradient P.S.I./Ft.			
Well Temperature °F.			
Initial Hydrostatic Mud A			
Initial Shut-in B			
Initial Flow C			
Final Flow D			
Final Shut-in E			
Final Hydrostatic Mud F			

Field Report No. 09112 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
98	600.9		162	617.8		226	562.8	
100	602.3		164	617.8		228	562.8	
102	603.7		166	617.8		230	562.8	
104	605.1		168	617.8		235	561.4	
106	605.1		170	617.8		240	561.4	
108	606.5		172	617.8		245	559.9	
110	606.5		174	617.8		250	559.9	
112	607.9		176	619.1		255	559.9	
114	607.9		178	619.1		260	558.5	
116	609.3		180	619.1		265	558.5	
118	609.3		182	619.1		11 270	558.5	
120	609.3		184	619.1		12 271	519.0	
122	610.7		186	619.1		272	526.1	
124	610.7		188	619.1		273	536.0	
126	610.7		190	620.6		274	541.6	
128	612.1		192	622.0		275	548.7	
130	612.1		194	622.0		276	554.3	
132	612.1		196	622.0		277	556.5	
134	613.5		198	622.0		278	564.2	
136	613.5		200	622.0		279	567.0	
138	613.5		202	622.0		280	571.2	
140	613.5		204	622.0		281	574.0	
142	614.9		206	622.0		282	578.3	
144	614.9		208	622.0		283	579.7	
146	614.9		210	622.0		284	582.5	
148	614.9		8 212	622.0		285	583.9	
150	614.9		9 214	674.2		286	585.3	
152	616.4		10 216	568.4	II B-1258	287	588.1	
154	616.4		218	564.2		288	588.1	
156	616.4		220	562.8		289	591.0	
158	616.4		222	562.8		290	592.4	
160	617.8		224	562.8		291	593.8	

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09112 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

**Shut in pressure did not reach static reservoir pressure.*

Clock Travel ______ inches per min.

PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
292	595.2		324	614.9		366	655.8	
293	596.6		325	614.9		368	660.1	
294	598.0		326	614.9		370	664.3	
295	600.8		327	614.9		372	668.5	
296	600.8		328	614.9		374	671.4	
297	602.3		329	614.9		376	674.2	
298	603.7		330	616.4		378	677.0	
299	603.7		331	616.4		380	679.8	
300	605.1		332	616.4		15 381	681.2	
301	605.1		333	616.4		382	686.9	
302	606.5		334	616.4		384	703.8	
303	606.5		335	616.4		386	719.3	
304	607.9		336	616.4		388	729.2	
305	607.9		337	616.4		390	741.9	
306	609.3		338	616.4		392	751.8	
307	609.3		339	616.4		394	763.0	
308	609.3		340	617.8		396	771.5	
309	610.7		341	617.8		398	780.0	
310	610.7		342	617.8		400	788.4	
311	610.7		343	617.8		402	795.5	
312	610.7		13 344	617.8		16 404	806.8	
313	612.1		346	623.4		406	788.4	
314	612.1		348	627.6		408	770.1	
315	613.5		350	630.5		410	754.6	
316	613.5		352	634.7		412	741.9	
317	613.5		354	636.1		414	729.2	
318	613.5		356	638.9		416	717.9	
319	613.5		358	640.3	II B-1259	418	708.0	
320	613.5		360	643.2		420	698.2	
321	613.5		362	644.6		422	691.1	
322	613.5		14 363	644.6		424	684.1	
323	614.9		364	650.2		426	678.4	

PRESSURE DATA

Instrument No.		32342 N		
Capacity (P.S.I.G.)				
Instrument Depth				
Instrument Opening				
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.				
Initial Hydrostatic Mud	A			
Initial Shut-in	B			
Initial Flow	C			
Final Flow	D			
Final Shut-in	E			
Final Hydrostatic Mud	F			

Field Report No. 09112 C

TIME DATA

Time Given	Time Computed
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.
Mins.	Mins.

Remarks:

*Shut in pressure did not reach static reservoir pressure.

Clock Travel ______ inches per min.

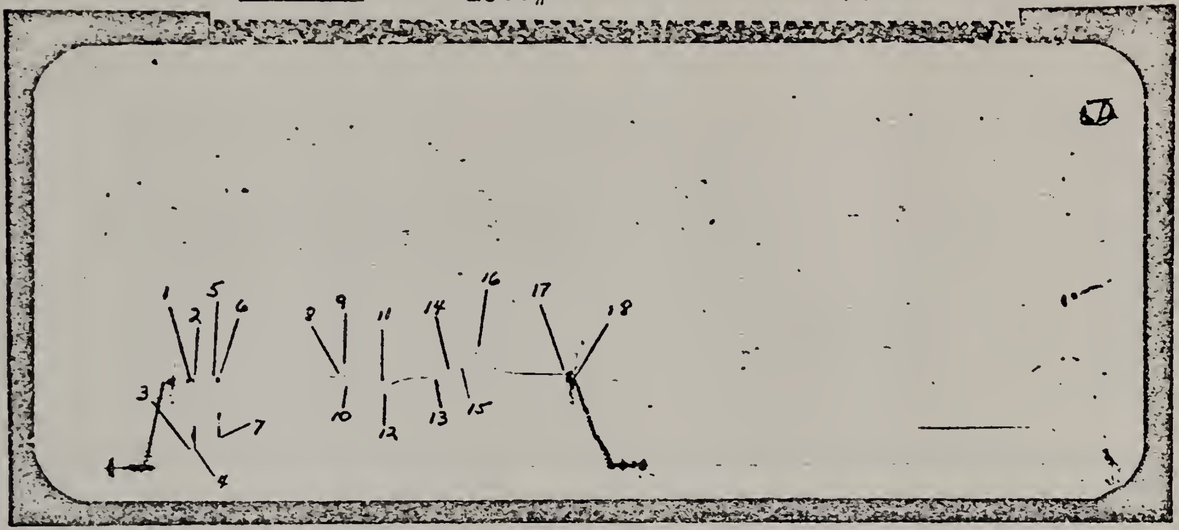
PRESSURE INCREMENTS

Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$	Point Minutes	Pressure	$\frac{T+\Delta t}{\Delta t}$
428	672.8		492	636.1				
430	668.5		494	636.1				
432	665.7		496	636.1				
434	661.5		498	634.7				
436	658.7		500	634.7				
438	655.8		502	634.7				
440	653.0		504	634.7				
442	651.6		506	634.7				
444	648.8		508	634.7				
446	647.4		510	634.7				
448	646.0		512	634.7				
450	646.0		514	634.7				
452	644.6		516	634.7				
454	643.2		518	634.7				
456	643.2		520	633.3				
458	641.7		522	633.3				
460	641.7		524	633.3				
462	640.3		526	633.3				
464	640.3		17 527	633.3				
466	638.9		18	596.6				
468	638.9							
470	638.9							
472	637.5							
474	637.5							
476	637.5							
478	637.5							
480	637.5							
482	637.5							
484	637.5							
486	637.5							
488	636.1							
490	636.1							

II B-1260

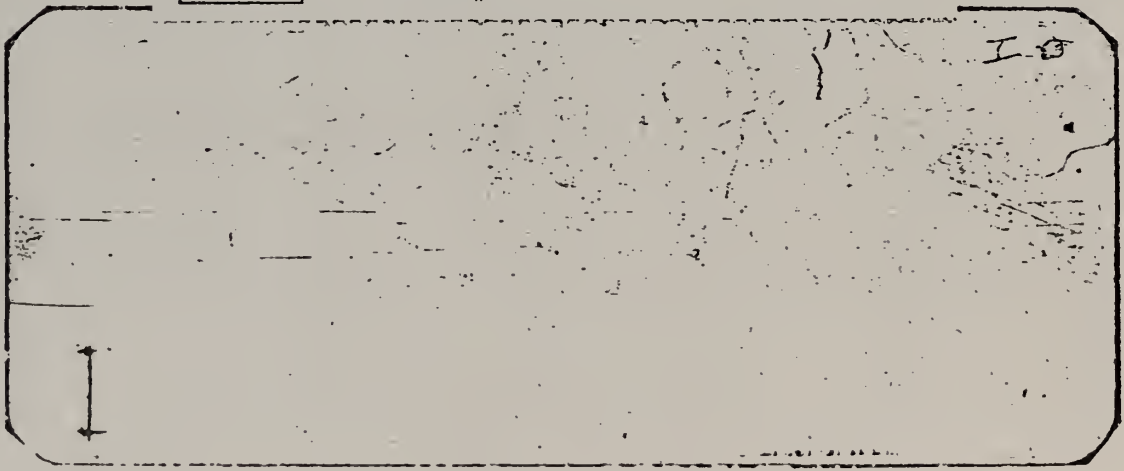
JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09112 C	32342 N
CAPACITY	**REPORTS REQUESTED**
2800#	14+



JOHNSTON

FIELD REPORT NO.	RECORDER NO.
09112 C	4633 N
CAPACITY	**REPORTS REQUESTED**
2650#	14+



DST 28
1768-1820

PRESSURE GAUGE DRILL STEM TEST SHEET

Job No. SPG 11210 Z Date 12/19/74 Run DST 28 Office CASPER

Customer ARCO ET AL Location S-G Tract

State Colorado County/Parish Rio Blanco

Well Sorghum Gulch No. 17 Field

USE MILITARY TIME FOR ALL TIMES

	Time	Date	Time	Date	Time Charged
Arrive: Well/~~Dock~~	1. 1000	12/19/74	2.		
Depart: Well/~~Dock~~	1. 1100	12/20/74	2.		Hrs.
Gauge Start in Hole	1. 2122	12/19/74	2.		
Gauge Out of Hole	1. 1025	12/20/74	2.		Hrs.

No. Trips 1 Miles 90 Total Mileage 90

Top Gauge # 71 Element # 30951 Range 1000 Time Mode 1 min

Btm. Gauge # 98 Element # 2900 i N Range 2500 Time Mode 1 min

Type Tool DST Test Depth 1768' - 1820' Zero Point Ground level

Packer Depth 1768' Tail Pipe Depth 1820' Top Gauge Depth 1727'

Bottom Hole Temp. 96° F Atmos. Temp. 20° F Bottom Gauge Depth 1779'

TIME INFORMATION	Time	Date	PRESSURE INFORMATION	
On Bottom	2324	12/19/74	Initial Hydrostatic ~~Mud~~	581
Packer Set	2330	12/19/74	Initial Draw Down	119
Initial Open	2332	12/19/74	Initial Build-Up	609
Initial Shut-In	2334	12/19/74	Final Flow	196
Start Flow	0008	12/20/74	Final Build-Up	609
Final Shut-In	0818	12/20/74	Final Hydrostatic Mud	
Packer Unseated	0820	12/20/74	Mud Weight	

TIME OF SURFACE NULLS

Top Gauge ____ ____ ____ Bottom Gauge ____ ____ ____

Remarks

SP-423

II B-1262

Operator

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT S-G SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE NO. 71 WITH 1000 LB. ELEMENT

GAUGE DEPTH IS 1727 OUTSIDE DRILL PIPE

ABOVE PACKER

TEST INTERVAL SURFACE TO 1727 FT.

PACKER DEPTH 1768 FT.

INITIAL HYDROSTATIC IS 543.942 PSI

FINAL HYDROSTATIC IS 542.168 PSI

517 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                              DATE OF JOB
SPG-11210-Z                                                                12-19-74

GAUGE/RUN NUMBER                                                        DATE OF RUN
71 DST NO, 28  TOP OUTSIDE                                                 12-19-74

                               SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

   DELTA    PRESSURE                   TIME      DATE              COMMENTS
   TIME      (PSI)                    HR MIN

   0,000     545,928                  23   39 DEC 19,1974   INITIAL SHUTIN
    ,017     545,976                  23   40 DEC 19,1974
    ,033     546,023                  23   41 DEC 19,1974
    ,050     545,976                  23   42 DEC 19,1974
    ,067     545,976                  23   43 DEC 19,1974
    ,083     545,976                  23   44 DEC 19,1974
    ,100     546,046                  23   45 DEC 19,1974
    ,117     546,046                  23   46 DEC 19,1974
    ,133     546,023                  23   47 DEC 19,1974
    ,150     546,046                  23   48 DEC 19,1974
    ,167     546,070                  23   49 DEC 19,1974
    ,183     546,070                  23   50 DEC 19,1974
    ,200     546,094                  23   51 DEC 19,1974
    ,217     546,117                  23   52 DEC 19,1974
    ,233     546,141                  23   53 DEC 19,1974
    ,250     546,141                  23   54 DEC 19,1974
    ,267     546,141                  23   55 DEC 19,1974
    ,283     546,212                  23   56 DEC 19,1974
    ,300     546,212                  23   57 DEC 19,1974
    ,317     546,212                  23   58 DEC 19,1974
    ,333     546,236                  23   59 DEC 19,1974
    ,350     546,259                  00   00 DEC 20,1974
    ,367     546,283                  00   01 DEC 20,1974
    ,383     546,307                  00   02 DEC 20,1974
    ,400     546,330                  00   03 DEC 20,1974
    ,417     546,330                  00   04 DEC 20,1974
    ,433     546,354                  00   05 DEC 20,1974
    ,450     546,378                  00   06 DEC 20,1974
    ,467     546,401                  00   07 DEC 20,1974
    ,483     546,425                  00   08 DEC 20,1974   END SHUT IN
```

```
                     30 POINTS REPORTED THIS RUN

                             PAGE  2
```

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
0,000	547,182	00 11	DEC 20,1974	OPEN TO FLOW
,017	547,205	00 12	DEC 20,1974	
,033	547,229	00 13	DEC 20,1974	
,050	547,229	00 14	DEC 20,1974	
,067	547,205	00 15	DEC 20,1974	
,084	547,182	00 16	DEC 20,1974	
,100	547,276	00 17	DEC 20,1974	
,117	547,300	00 18	DEC 20,1974	
,134	547,300	00 19	DEC 20,1974	
,150	547,276	00 20	DEC 20,1974	
,167	547,300	00 21	DEC 20,1974	
,184	547,347	00 22	DEC 20,1974	
,200	547,371	00 23	DEC 20,1974	
,217	547,323	00 24	DEC 20,1974	
,234	547,371	00 25	DEC 20,1974	
,251	547,418	00 26	DEC 20,1974	
,267	547,418	00 27	DEC 20,1974	
,284	547,465	00 28	DEC 20,1974	
,301	547,465	00 29	DEC 20,1974	
,317	547,536	00 30	DEC 20,1974	
,334	547,513	00 31	DEC 20,1974	
,351	547,513	00 32	DEC 20,1974	
,367	547,584	00 33	DEC 20,1974	
,384	547,560	00 34	DEC 20,1974	
,401	547,607	00 35	DEC 20,1974	
,418	547,655	00 36	DEC 20,1974	
,434	547,655	00 37	DEC 20,1974	
,451	547,655	00 38	DEC 20,1974	
,468	547,678	00 39	DEC 20,1974	
,484	547,702	00 40	DEC 20,1974	
,501	547,773	00 41	DEC 20,1974	
,518	547,725	00 42	DEC 20,1974	
,534	547,749	00 43	DEC 20,1974	
,551	547,773	00 44	DEC 20,1974	
,568	547,773	00 45	DEC 20,1974	
,585	547,844	00 46	DEC 20,1974	
,601	547,844	00 47	DEC 20,1974	
,618	547,796	00 48	DEC 20,1974	
,635	547,796	00 49	DEC 20,1974	
,651	547,820	00 50	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
,668	547,844	00	51	DEC 20,1974	
,685	547,867	00	52	DEC 20,1974	
,701	547,915	00	53	DEC 20,1974	
,718	547,962	00	54	DEC 20,1974	
,735	547,986	00	55	DEC 20,1974	
,752	547,986	00	56	DEC 20,1974	
,768	547,938	00	57	DEC 20,1974	
,785	547,986	00	58	DEC 20,1974	
,802	547,986	00	59	DEC 20,1974	
,818	548,080	01	00	DEC 20,1974	
,835	548,057	01	01	DEC 20,1974	
,852	548,104	01	02	DEC 20,1974	
,868	548,104	01	03	DEC 20,1974	
,885	548,104	01	04	DEC 20,1974	
,902	548,175	01	05	DEC 20,1974	
,919	548,175	01	06	DEC 20,1974	
,935	548,104	01	07	DEC 20,1974	
,952	548,127	01	08	DEC 20,1974	
,969	548,127	01	09	DEC 20,1974	
,985	548,198	01	10	DEC 20,1974	
1,002	548,269	01	11	DEC 20,1974	
1,019	548,246	01	12	DEC 20,1974	
1,035	548,269	01	13	DEC 20,1974	
1,052	548,340	01	14	DEC 20,1974	
1,069	548,293	01	15	DEC 20,1974	
1,086	548,246	01	16	DEC 20,1974	
1,102	548,293	01	17	DEC 20,1974	
1,119	548,340	01	18	DEC 20,1974	
1,136	548,340	01	19	DEC 20,1974	
1,152	548,340	01	20	DEC 20,1974	
1,169	548,340	01	21	DEC 20,1974	
1,186	548,364	01	22	DEC 20,1974	
1,202	548,388	01	23	DEC 20,1974	
1,219	548,411	01	24	DEC 20,1974	
1,236	548,435	01	25	DEC 20,1974	
1,253	548,482	01	26	DEC 20,1974	
1,269	548,482	01	27	DEC 20,1974	
1,286	548,482	01	28	DEC 20,1974	
1,303	548,530	01	29	DEC 20,1974	
1,319	548,553	01	30	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
1,336	548,553	01	31	DEC 20,1974	
1,353	548,577	01	32	DEC 20,1974	
1,369	548,600	01	33	DEC 20,1974	
1,386	548,553	01	34	DEC 20,1974	
1,403	548,577	01	35	DEC 20,1974	
1,420	548,553	01	36	DEC 20,1974	
1,436	548,648	01	37	DEC 20,1974	
1,453	548,577	01	38	DEC 20,1974	
1,470	548,671	01	39	DEC 20,1974	
1,486	548,624	01	40	DEC 20,1974	
1,503	548,719	01	41	DEC 20,1974	
1,520	548,719	01	42	DEC 20,1974	
1,536	548,671	01	43	DEC 20,1974	
1,553	548,719	01	44	DEC 20,1974	
1,570	548,766	01	45	DEC 20,1974	
1,587	548,790	01	46	DEC 20,1974	
1,603	548,766	01	47	DEC 20,1974	
1,620	548,837	01	48	DEC 20,1974	
1,637	548,837	01	49	DEC 20,1974	
1,653	548,861	01	50	DEC 20,1974	
1,670	548,837	01	51	DEC 20,1974	
1,687	548,884	01	52	DEC 20,1974	
1,704	548,884	01	53	DEC 20,1974	
1,720	548,908	01	54	DEC 20,1974	
1,737	548,955	01	55	DEC 20,1974	
1,754	548,955	01	56	DEC 20,1974	
1,770	548,932	01	57	DEC 20,1974	
1,787	548,955	01	58	DEC 20,1974	
1,804	548,979	01	59	DEC 20,1974	
1,820	549,002	02	00	DEC 20,1974	
1,837	549,002	02	01	DEC 20,1974	
1,854	549,002	02	02	DEC 20,1974	
1,871	549,026	02	03	DEC 20,1974	
1,887	549,050	02	04	DEC 20,1974	
1,904	549,073	02	05	DEC 20,1974	
1,921	549,097	02	06	DEC 20,1974	
1,937	549,073	02	07	DEC 20,1974	END RECOVERY
1,954	549,097	02	08	DEC 20,1974	
1,971	549,121	02	09	DEC 20,1974	
1,987	549,121	02	10	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
2.004	549.121	02	11	DEC 20,1974	
2.021	549.168	02	12	DEC 20,1974	
2.038	549.192	02	13	DEC 20,1974	
2.054	549.192	02	14	DEC 20,1974	
2.071	549.168	02	15	DEC 20,1974	
2.088	549.192	02	16	DEC 20,1974	
2.104	549.215	02	17	DEC 20,1974	
2.121	549.215	02	18	DEC 20,1974	
2.138	549.263	02	19	DEC 20,1974	
2.154	549.263	02	20	DEC 20,1974	
2.171	549.239	02	21	DEC 20,1974	
2.188	549.263	02	22	DEC 20,1974	
2.205	549.286	02	23	DEC 20,1974	
2.221	549.334	02	24	DEC 20,1974	
2.238	549.310	02	25	DEC 20,1974	
2.255	549.334	02	26	DEC 20,1974	
2.271	549.334	02	27	DEC 20,1974	
2.288	549.357	02	28	DEC 20,1974	
2.305	549.381	02	29	DEC 20,1974	
2.321	549.381	02	30	DEC 20,1974	
2.338	549.404	02	31	DEC 20,1974	
2.355	549.404	02	32	DEC 20,1974	
2.372	549.404	02	33	DEC 20,1974	
2.388	549.428	02	34	DEC 20,1974	
2.405	549.452	02	35	DEC 20,1974	
2.422	549.452	02	36	DEC 20,1974	
2.438	549.475	02	37	DEC 20,1974	
2.455	549.546	02	38	DEC 20,1974	
2.472	549.523	02	39	DEC 20,1974	
2.488	549.523	02	40	DEC 20,1974	
2.505	549.546	02	41	DEC 20,1974	
2.522	549.546	02	42	DEC 20,1974	
2.539	549.570	02	43	DEC 20,1974	
2.555	549.570	02	44	DEC 20,1974	
2.572	549.546	02	45	DEC 20,1974	
2.589	549.570	02	46	DEC 20,1974	
2.605	549.594	02	47	DEC 20,1974	
2.622	549.617	02	48	DEC 20,1974	
2.639	549.641	02	49	DEC 20,1974	
2.655	549.641	02	50	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2,672	549,641	02	51	DEC 20,1974	
2,689	549,665	02	52	DEC 20,1974	
2,706	549,665	02	53	DEC 20,1974	
2,722	549,665	02	54	DEC 20,1974	
2,739	549,712	02	55	DEC 20,1974	
2,756	549,688	02	56	DEC 20,1974	
2,772	549,665	02	57	DEC 20,1974	
2,789	549,759	02	58	DEC 20,1974	
2,806	549,759	02	59	DEC 20,1974	
2,822	549,759	03	00	DEC 20,1974	
2,839	549,783	03	01	DEC 20,1974	START JETTING
2,856	549,759	03	02	DEC 20,1974	
2,873	549,783	03	03	DEC 20,1974	
2,889	549,759	03	04	DEC 20,1974	
2,906	549,806	03	05	DEC 20,1974	
2,923	549,830	03	06	DEC 20,1974	
2,939	549,901	03	07	DEC 20,1974	
2,956	549,925	03	08	DEC 20,1974	
2,973	549,854	03	09	DEC 20,1974	
2,989	549,901	03	10	DEC 20,1974	
3,006	549,901	03	11	DEC 20,1974	
3,023	549,901	03	12	DEC 20,1974	
3,040	549,925	03	13	DEC 20,1974	
3,056	549,925	03	14	DEC 20,1974	
3,073	549,948	03	15	DEC 20,1974	
3,090	549,925	03	16	DEC 20,1974	
3,106	549,925	03	17	DEC 20,1974	
3,123	549,948	03	18	DEC 20,1974	
3,140	549,948	03	19	DEC 20,1974	
3,156	549,972	03	20	DEC 20,1974	
3,173	549,996	03	21	DEC 20,1974	
3,190	549,996	03	22	DEC 20,1974	
3,207	550,019	03	23	DEC 20,1974	
3,223	549,996	03	24	DEC 20,1974	
3,240	550,019	03	25	DEC 20,1974	
3,257	550,043	03	26	DEC 20,1974	
3,273	550,043	03	27	DEC 20,1974	
3,290	550,067	03	28	DEC 20,1974	
3,307	550,019	03	29	DEC 20,1974	
3,323	550,090	03	30	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3,340	550,114	03	31	DEC 20,1974	
3,357	550,114	03	32	DEC 20,1974	
3,374	550,090	03	33	DEC 20,1974	
3,390	550,138	03	34	DEC 20,1974	
3,407	550,161	03	35	DEC 20,1974	
3,424	550,161	03	36	DEC 20,1974	
3,440	550,161	03	37	DEC 20,1974	
3,457	550,185	03	38	DEC 20,1974	
3,474	550,161	03	39	DEC 20,1974	
3,491	550,185	03	40	DEC 20,1974	
3,507	550,209	03	41	DEC 20,1974	
3,524	550,232	03	42	DEC 20,1974	
3,541	550,232	03	43	DEC 20,1974	
3,557	550,279	03	44	DEC 20,1974	
3,574	550,256	03	45	DEC 20,1974	
3,591	550,279	03	46	DEC 20,1974	
3,607	550,279	03	47	DEC 20,1974	
3,624	550,374	03	48	DEC 20,1974	
3,641	550,374	03	49	DEC 20,1974	
3,658	550,327	03	50	DEC 20,1974	
3,674	550,350	03	51	DEC 20,1974	
3,691	550,350	03	52	DEC 20,1974	
3,708	550,350	03	53	DEC 20,1974	
3,724	550,350	03	54	DEC 20,1974	
3,741	550,374	03	55	DEC 20,1974	
3,758	550,421	03	56	DEC 20,1974	
3,774	550,374	03	57	DEC 20,1974	
3,791	550,421	03	58	DEC 20,1974	
3,808	550,445	03	59	DEC 20,1974	END JETTING
3,825	550,445	04	00	DEC 20,1974	
3,841	550,492	04	01	DEC 20,1974	
3,858	550,492	04	02	DEC 20,1974	
3,875	550,492	04	03	DEC 20,1974	
3,891	550,469	04	04	DEC 20,1974	
3,908	550,469	04	05	DEC 20,1974	
3,925	550,492	04	06	DEC 20,1974	
3,941	550,516	04	07	DEC 20,1974	
3,958	550,516	04	08	DEC 20,1974	
3,975	550,540	04	09	DEC 20,1974	
3,992	550,563	04	10	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
4.008	550.587	04	11	DEC 20,1974	
4.025	550.587	04	12	DEC 20,1974	
4.042	550.611	04	13	DEC 20,1974	
4.058	550.634	04	15	DEC 20,1974	
4.075	550.611	04	16	DEC 20,1974	
4.092	550.634	04	17	DEC 20,1974	
4.108	550.634	04	18	DEC 20,1974	
4.125	550.681	04	19	DEC 20,1974	
4.142	550.705	04	20	DEC 20,1974	
4.159	550.729	04	21	DEC 20,1974	
4.175	550.705	04	22	DEC 20,1974	
4.192	550.729	04	23	DEC 20,1974	
4.209	550.752	04	24	DEC 20,1974	
4.225	550.752	04	25	DEC 20,1974	
4.242	550.752	04	26	DEC 20,1974	
4.259	550.800	04	27	DEC 20,1974	
4.275	550.823	04	28	DEC 20,1974	
4.292	550.800	04	29	DEC 20,1974	
4.309	550.800	04	30	DEC 20,1974	
4.326	550.823	04	31	DEC 20,1974	
4.342	550.823	04	32	DEC 20,1974	
4.359	550.847	04	33	DEC 20,1974	
4.376	550.847	04	34	DEC 20,1974	
4.392	550.823	04	35	DEC 20,1974	
4.409	550.871	04	36	DEC 20,1974	
4.426	550.871	04	37	DEC 20,1974	
4.442	550.847	04	38	DEC 20,1974	
4.459	550.847	04	39	DEC 20,1974	
4.476	550.918	04	40	DEC 20,1974	
4.493	550.942	04	41	DEC 20,1974	
4.509	550.942	04	42	DEC 20,1974	
4.526	550.942	04	43	DEC 20,1974	
4.543	550.965	04	44	DEC 20,1974	
4.559	550.989	04	45	DEC 20,1974	
4.576	550.989	04	46	DEC 20,1974	
4.593	550.965	04	47	DEC 20,1974	
4.609	550.989	04	48	DEC 20,1974	
4.626	551.013	04	49	DEC 20,1974	
4.643	551.013	04	50	DEC 20,1974	
4.660	551.036	04	51	DEC 20,1974	

JOB NUMBER
8PG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4,676	551,060	04	52	DEC 20,1974	
4,693	551,036	04	53	DEC 20,1974	
4,710	551,083	04	54	DEC 20,1974	
4,726	551,083	04	55	DEC 20,1974	
4,743	551,083	04	56	DEC 20,1974	
4,760	551,060	04	57	DEC 20,1974	
4,776	551,083	04	58	DEC 20,1974	
4,793	551,083	04	59	DEC 20,1974	
4,810	551,107	05	00	DEC 20,1974	
4,827	551,107	05	01	DEC 20,1974	
4,843	551,107	05	02	DEC 20,1974	
4,860	551,131	05	03	DEC 20,1974	
4,877	551,178	05	04	DEC 20,1974	
4,893	551,202	05	05	DEC 20,1974	
4,910	551,178	05	06	DEC 20,1974	
4,927	551,202	05	07	DEC 20,1974	
4,943	551,202	05	08	DEC 20,1974	
4,960	551,225	05	09	DEC 20,1974	
4,977	551,249	05	10	DEC 20,1974	2 G/M DP
4,994	551,249	05	11	DEC 20,1974	
5,010	551,249	05	12	DEC 20,1974	
5,027	551,320	05	13	DEC 20,1974	
5,044	551,273	05	14	DEC 20,1974	
5,060	551,296	05	15	DEC 20,1974	
5,077	551,320	05	16	DEC 20,1974	
5,094	551,320	05	17	DEC 20,1974	
5,111	551,296	05	18	DEC 20,1974	
5,127	551,320	05	19	DEC 20,1974	
5,144	551,344	05	20	DEC 20,1974	
5,161	551,344	05	21	DEC 20,1974	
5,177	551,320	05	22	DEC 20,1974	
5,194	551,367	05	23	DEC 20,1974	
5,211	551,391	05	24	DEC 20,1974	
5,227	551,391	05	25	DEC 20,1974	
5,244	551,415	05	26	DEC 20,1974	
5,261	551,415	05	27	DEC 20,1974	
5,278	551,415	05	28	DEC 20,1974	
5,294	551,438	05	29	DEC 20,1974	
5,311	551,415	05	30	DEC 20,1974	5 G/M DP
5,328	551,438	05	31	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
5,344	551,485	05	32	DEC 20,1974	
5,361	551,485	05	33	DEC 20,1974	
5,378	551,462	05	34	DEC 20,1974	
5,394	551,485	05	35	DEC 20,1974	
5,411	551,485	05	36	DEC 20,1974	
5,428	551,485	05	37	DEC 20,1974	
5,445	551,509	05	38	DEC 20,1974	
5,461	551,533	05	39	DEC 20,1974	
5,478	551,533	05	40	DEC 20,1974	
5,495	551,556	05	41	DEC 20,1974	
5,511	551,509	05	42	DEC 20,1974	
5,528	551,556	05	43	DEC 20,1974	
5,545	551,580	05	44	DEC 20,1974	
5,561	551,604	05	45	DEC 20,1974	
5,578	551,604	05	46	DEC 20,1974	
5,595	551,604	05	47	DEC 20,1974	
5,612	551,627	05	48	DEC 20,1974	
5,628	551,651	05	49	DEC 20,1974	
5,645	551,651	05	50	DEC 20,1974	11 G/M DP
5,662	551,675	05	51	DEC 20,1974	
5,678	551,698	05	52	DEC 20,1974	
5,695	551,698	05	53	DEC 20,1974	
5,712	551,698	05	54	DEC 20,1974	
5,728	551,722	05	55	DEC 20,1974	
5,745	551,746	05	56	DEC 20,1974	
5,762	551,722	05	57	DEC 20,1974	
5,779	551,746	05	58	DEC 20,1974	
5,795	551,793	05	59	DEC 20,1974	
5,812	551,793	06	00	DEC 20,1974	
5,829	551,793	06	01	DEC 20,1974	
5,845	551,793	06	02	DEC 20,1974	
5,862	551,840	06	03	DEC 20,1974	
5,879	551,864	06	04	DEC 20,1974	
5,895	551,840	06	05	DEC 20,1974	
5,912	551,864	06	06	DEC 20,1974	
5,929	551,864	06	07	DEC 20,1974	
5,946	551,888	06	08	DEC 20,1974	
5,962	551,888	06	09	DEC 20,1974	
5,979	551,911	06	10	DEC 20,1974	20 G/M DP
5,996	551,911	06	11	DEC 20,1974	

JOB NUMBER SPG-11210-Z	DATE OF JOB 12-19-74
GAUGE/RUN NUMBER 71 DST NO. 28	DATE OF RUN 12-20-74

SPERRY-SUN

PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6,012	551,935	06	12	DEC 20,1974	START DECLINE
6,029	551,958	06	13	DEC 20,1974	FOR 30 MINUTES
6,046	551,935	06	14	DEC 20,1974	
6,062	552,006	06	15	DEC 20,1974	
6,079	552,006	06	16	DEC 20,1974	
6,096	552,006	06	17	DEC 20,1974	
6,113	552,006	06	18	DEC 20,1974	
6,129	552,029	06	19	DEC 20,1974	
6,146	552,029	06	20	DEC 20,1974	
6,163	552,029	06	21	DEC 20,1974	
6,179	552,077	06	22	DEC 20,1974	
6,196	552,077	06	23	DEC 20,1974	
6,213	552,077	06	24	DEC 20,1974	
6,229	552,100	06	25	DEC 20,1974	
6,246	552,077	06	26	DEC 20,1974	
6,263	552,124	06	27	DEC 20,1974	
6,280	552,124	06	28	DEC 20,1974	
6,296	552,148	06	29	DEC 20,1974	
6,313	552,148	06	30	DEC 20,1974	
6,330	552,148	06	31	DEC 20,1974	
6,346	552,171	06	32	DEC 20,1974	
6,363	552,171	06	33	DEC 20,1974	
6,380	552,148	06	34	DEC 20,1974	
6,396	552,171	06	35	DEC 20,1974	
6,413	552,219	06	36	DEC 20,1974	
6,430	552,195	06	37	DEC 20,1974	
6,447	552,195	06	38	DEC 20,1974	
6,463	552,219	06	39	DEC 20,1974	
6,480	552,219	06	40	DEC 20,1974	
6,497	552,219	06	41	DEC 20,1974	
6,513	552,242	06	42	DEC 20,1974	
6,530	552,219	06	43	DEC 20,1974	60 G/M ANNULUS
6,547	552,479	06	44	DEC 20,1974	
6,563	555,955	06	45	DEC 20,1974	
6,580	558,745	06	46	DEC 20,1974	
6,597	560,968	06	47	DEC 20,1974	
6,614	562,411	06	48	DEC 20,1974	
6,630	564,066	06	49	DEC 20,1974	
6,647	565,698	06	50	DEC 20,1974	
6,664	566,998	06	51	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.680	568.086	06	52	DEC 20,1974	
6.697	569.079	06	53	DEC 20,1974	
6.714	569.978	06	54	DEC 20,1974	
6.731	570.569	06	55	DEC 20,1974	
6.747	571.090	06	56	DEC 20,1974	
6.764	571.633	06	57	DEC 20,1974	
6.781	572.390	06	58	DEC 20,1974	
6.797	573.052	06	59	DEC 20,1974	
6.814	573.525	07	00	DEC 20,1974	
6.831	574.093	07	01	DEC 20,1974	
6.847	574.589	07	02	DEC 20,1974	
6.864	575.015	07	03	DEC 20,1974	
6.881	575.370	07	04	DEC 20,1974	
6.898	575.819	07	05	DEC 20,1974	
6.914	576.268	07	06	DEC 20,1974	
6.931	576.599	07	07	DEC 20,1974	
6.948	576.860	07	08	DEC 20,1974	
6.964	577.167	07	09	DEC 20,1974	
6.981	577.474	07	10	DEC 20,1974	
6.998	577.711	07	11	DEC 20,1974	
7.014	578.042	07	12	DEC 20,1974	
7.031	578.278	07	13	DEC 20,1974	
7.048	578.610	07	14	DEC 20,1974	
7.065	578.846	07	15	DEC 20,1974	
7.081	579.106	07	16	DEC 20,1974	
7.098	579.414	07	17	DEC 20,1974	
7.115	579.603	07	18	DEC 20,1974	
7.131	579.768	07	19	DEC 20,1974	
7.148	579.934	07	20	DEC 20,1974	
7.165	580.052	07	21	DEC 20,1974	
7.181	580.218	07	22	DEC 20,1974	
7.198	580.383	07	23	DEC 20,1974	
7.215	580.549	07	24	DEC 20,1974	
7.232	580.667	07	25	DEC 20,1974	
7.248	580.761	07	26	DEC 20,1974	
7.265	580.761	07	27	DEC 20,1974	
7.282	580.880	07	28	DEC 20,1974	
7.298	580.998	07	29	DEC 20,1974	
7.315	581.069	07	30	DEC 20,1974	
7.332	581.211	07	31	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7.348	581.329	07	32	DEC 20,1974	
7.365	581.424	07	33	DEC 20,1974	
7.382	581.566	07	34	DEC 20,1974	
7.399	581.731	07	35	DEC 20,1974	
7.415	581.849	07	36	DEC 20,1974	
7.432	581.968	07	37	DEC 20,1974	
7.449	582.086	07	38	DEC 20,1974	
7.465	582.204	07	39	DEC 20,1974	
7.482	582.275	07	40	DEC 20,1974	
7.499	582.346	07	41	DEC 20,1974	
7.515	582.440	07	42	DEC 20,1974	
7.532	582.464	07	43	DEC 20,1974	
7.549	582.511	07	44	DEC 20,1974	
7.566	582.606	07	45	DEC 20,1974	
7.582	582.653	07	46	DEC 20,1974	
7.599	582.701	07	47	DEC 20,1974	START RECOVERY
7.616	582.606	07	48	DEC 20,1974	FOR 20 MINUTES
7.632	579.437	07	49	DEC 20,1974	
7.649	575.914	07	50	DEC 20,1974	
7.666	573.691	07	51	DEC 20,1974	
7.682	571.019	07	52	DEC 20,1974	
7.699	568.843	07	53	DEC 20,1974	
7.716	566.880	07	54	DEC 20,1974	
7.733	565.154	07	55	DEC 20,1974	
7.749	564.019	07	56	DEC 20,1974	
7.766	562.695	07	57	DEC 20,1974	
7.783	561.867	07	58	DEC 20,1974	
7.799	560.826	07	59	DEC 20,1974	
7.816	559.951	08	00	DEC 20,1974	
7.833	559.171	08	01	DEC 20,1974	
7.849	558.722	08	02	DEC 20,1974	
7.866	558.060	08	03	DEC 20,1974	
7.883	557.658	08	04	DEC 20,1974	
7.900	557.208	08	05	DEC 20,1974	
7.916	556.806	08	06	DEC 20,1974	END RECOVERY
7.933	556.499	08	07	DEC 20,1974	
7.950	556.239	08	08	DEC 20,1974	
7.966	555.979	08	09	DEC 20,1974	
7.983	555.742	08	10	DEC 20,1974	
8.000	555.742	08	11	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
71 DST NO. 28

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
8.016	555.506	08	12	DEC 20,1974	
8.033	555.387	08	13	DEC 20,1974	
8.050	555.245	08	14	DEC 20,1974	
8.067	555.104	08	15	DEC 20,1974	
8.083	555.009	08	16	DEC 20,1974	
8.100	554.867	08	17	DEC 20,1974	
8.117	554.796	08	18	DEC 20,1974	END OF TEST

487 POINTS REPORTED THIS RUN

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

PREPARED FOR

ATLANTIC RICHFIELD COMPANY

WELL NUMBER	FEDERAL SG-17
FIELD/LEASE	TRACT S-G SORGHUM GULCH
COUNTY/PARISH	RIO BLANCO
STATE	COLORADO
TYPE OF TEST	DRILL STEM
REFERENCE ELEV	GROUND LEVEL

ADDITIONAL INFORMATION

USED GAUGE 98 WITH 2500 LB. ELEMENT

GAUGE DEPTH IS 1779 FT. INSIDE DRILL PIPE

BELOW PACKER

TEST INTERVAL 1768 FT. TO 1779 FT.

PACKER DEPTH 1768 FT.

INITIAL HYDROSTATIC IS 572,387 PSI

FINAL HYDROSTATIC IS 570,632 PSI

517 POINTS REPORTED THIS JOB

```
JOB NUMBER                                                          DATE OF JOB
8PG-11210-Z                                                            12-19-74

GAUGE/RUN NUMBER                                                    DATE OF RUN
98  DST NO, 28 BOTTOM INSIDE                                           12-19-74

                                  SPERRY-SUN
                  PRECISION SUBSURFACE PRESSURE GAUGE REPORT

      DELTA    PRESSURE                 TIME      DATE              COMMENTS
      TIME      (PSI)                  HR MIN

      0,000    146,782                 23  39 DEC 19,1974   INITIAL SHUTIN
       ,017    178,514                 23  40 DEC 19,1974
       ,033    418,811                 23  41 DEC 19,1974
       ,050    479,422                 23  42 DEC 19,1974
       ,067    542,257                 23  43 DEC 19,1974
       ,083    555,128                 23  44 DEC 19,1974
       ,100    562,909                 23  45 DEC 19,1974
       ,117    562,032                 23  46 DEC 19,1974
       ,133    571,100                 23  47 DEC 19,1974
       ,150    573,148                 23  48 DEC 19,1974
       ,167    574,552                 23  49 DEC 19,1974
       ,183    575,663                 23  50 DEC 19,1974
       ,200    576,482                 23  51 DEC 19,1974
       ,217    577,301                 23  52 DEC 19,1974
       ,233    577,945                 23  53 DEC 19,1974
       ,250    578,472                 23  54 DEC 19,1974
       .267    578,998                 23  55 DEC 19,1974
       ,283    579,525                 23  56 DEC 19,1974
       ,300    579,876                 23  57 DEC 19,1974
       ,317    580,344                 23  58 DEC 19,1974
       ,333    580,636                 23  59 DEC 19,1974
       ,350    581,046                 00  00 DEC 20,1974
       ,367    581,338                 00  01 DEC 20,1974
       ,383    581,631                 00  02 DEC 20,1974
       ,400    581,982                 00  03 DEC 20,1974
       ,417    582,274                 00  04 DEC 20,1974
       ,433    582,391                 00  05 DEC 20,1974
       ,450    582,742                 00  06 DEC 20,1974
       ,467    582,918                 00  07 DEC 20,1974
       ,483    583,152                 00  08 DEC 20,1974   END SHUT IN
```

```
                       30 POINTS REPORTED THIS RUN

                                PAGE  2
```

JOB NUMBER
8PG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
0,000	213,633	00	11	DEC 20,1974	OPEN TO FLOW
,017	224.106	00	12	DEC 20,1974	
,033	244,875	00	13	DEC 20,1974	
,050	260,086	00	14	DEC 20,1974	
,067	295,599	00	15	DEC 20,1974	
,084	313,853	00	16	DEC 20,1974	
,100	328,362	00	17	DEC 20,1974	
,117	341,760	00	18	DEC 20,1974	
,134	354,631	00	19	DEC 20,1974	
,150	367,034	00	20	DEC 20,1974	
,167	378,969	00	21	DEC 20,1974	
,184	390,494	00	22	DEC 20,1974	
,200	401,201	00	23	DEC 20,1974	
,217	411,439	00	24	DEC 20,1974	
,234	421,385	00	25	DEC 20,1974	
,251	430,922	00	26	DEC 20,1974	
,267	439.873	00	27	DEC 20,1974	
,284	448,590	00	28	DEC 20,1974	
,301	456,664	00	29	DEC 20,1974	
,317	464,152	00	30	DEC 20,1974	
,334	471,115	00	31	DEC 20,1974	
,351	477,784	00	32	DEC 20,1974	
,367	489,719	00	33	DEC 20,1974	
.384	495,453	00	34	DEC 20,1974	
,401	500,894	00	35	DEC 20,1974	
,418	505,925	00	36	DEC 20,1974	
.434	510,723	00	37	DEC 20,1974	
,451	515,345	00	38	DEC 20,1974	
,468	519,732	00	39	DEC 20,1974	
,484	523,360	00	40	DEC 20,1974	
.501	526.870	00	41	DEC 20,1974	
,518	530,205	00	42	DEC 20,1974	
.534	533,540	00	43	DEC 20,1974	
,551	536,465	00	44	DEC 20,1974	
,568	539.273	00	45	DEC 20,1974	
,585	541.847	00	46	DEC 20,1974	
,601	544.246	00	47	DEC 20,1974	
,618	546,703	00	48	DEC 20,1974	
,635	548,751	00	49	DEC 20,1974	
,651	550,740	00	50	DEC 20,1974	

JOB NUMBER
8PG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
.668	552.612	00	51	DEC 20,1974	
.685	554.250	00	52	DEC 20,1974	
.701	555.947	00	53	DEC 20,1974	
.718	557.351	00	54	DEC 20,1974	
.735	558.814	00	55	DEC 20,1974	
.752	560.101	00	56	DEC 20,1974	
.768	561.388	00	57	DEC 20,1974	
.785	562.500	00	58	DEC 20,1974	
.802	563.611	00	59	DEC 20,1974	
.818	564.606	01	00	DEC 20,1974	
.835	565.542	01	01	DEC 20,1974	
.852	566.361	01	02	DEC 20,1974	
.868	567.297	01	03	DEC 20,1974	
.885	568.175	01	04	DEC 20,1974	
.902	568.877	01	05	DEC 20,1974	
.919	569.579	01	06	DEC 20,1974	
.935	570.222	01	07	DEC 20,1974	
.952	570.866	01	08	DEC 20,1974	
.969	571.451	01	09	DEC 20,1974	
.985	571.978	01	10	DEC 20,1974	
1.002	572.504	01	11	DEC 20,1974	
1.019	573.031	01	12	DEC 20,1974	
1.035	573.499	01	13	DEC 20,1974	
1.052	573.967	01	14	DEC 20,1974	
1.069	574.435	01	15	DEC 20,1974	
1.086	574.786	01	16	DEC 20,1974	
1.102	575.195	01	17	DEC 20,1974	
1.119	575.663	01	18	DEC 20,1974	
1.136	576.307	01	19	DEC 20,1974	
1.152	576.716	01	20	DEC 20,1974	
1.169	577.067	01	21	DEC 20,1974	
1.186	577.419	01	22	DEC 20,1974	
1.202	577.711	01	23	DEC 20,1974	
1.219	578.062	01	24	DEC 20,1974	
1.236	578.413	01	25	DEC 20,1974	
1.253	578.589	01	26	DEC 20,1974	
1.269	578.881	01	27	DEC 20,1974	
1.286	579.115	01	28	DEC 20,1974	
1.303	579.466	01	29	DEC 20,1974	
1.319	579.700	01	30	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
1,336	579,993	01	31	DEC 20,1974	
1,353	580,285	01	32	DEC 20,1974	
1,369	580,402	01	33	DEC 20,1974	
1,386	580.636	01	34	DEC 20,1974	
1,403	580,929	01	35	DEC 20,1974	
1,420	581,163	01	36	DEC 20,1974	
1,436	581,338	01	37	DEC 20,1974	
1,453	581,514	01	38	DEC 20,1974	
1,470	581,748	01	39	DEC 20,1974	
1,486	581,923	01	40	DEC 20,1974	
1,503	582,099	01	41	DEC 20,1974	
1,520	582,333	01	42	DEC 20,1974	
1,536	582.450	01	43	DEC 20,1974	
1,553	582.625	01	44	DEC 20,1974	
1,570	582,859	01	45	DEC 20,1974	
1,587	582,976	01	46	DEC 20,1974	
1,603	583.152	01	47	DEC 20,1974	
1,620	583,328	01	48	DEC 20,1974	
1,637	583,503	01	49	DEC 20,1974	
1.653	583,679	01	50	DEC 20,1974	
1,670	583,796	01	51	DEC 20,1974	
1.687	583,913	01	52	DEC 20,1974	
1,704	584.088	01	53	DEC 20,1974	
1,720	584,205	01	54	DEC 20,1974	
1.737	584.381	01	55	DEC 20,1974	
1,754	584,439	01	56	DEC 20,1974	
1,770	584.556	01	57	DEC 20,1974	
1.787	584.732	01	58	DEC 20,1974	
1,804	584,849	01	59	DEC 20,1974	
1,820	584,966	02	00	DEC 20,1974	
1,837	585.083	02	01	DEC 20,1974	
1,854	585,258	02	02	DEC 20,1974	
1,871	585,375	02	03	DEC 20,1974	
1,887	585,492	02	04	DEC 20,1974	
1,904	585,609	02	05	DEC 20,1974	
1,921	585,726	02	06	DEC 20,1974	
1,937	585,785	02	07	DEC 20,1974	END RECOVERY
1,954	585,960	02	08	DEC 20,1974	
1,971	586,253	02	09	DEC 20,1974	
1,987	586,370	02	10	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2.004	586.487	02	11	DEC 20,1974	
2.021	586.604	02	12	DEC 20,1974	
2.038	586.662	02	13	DEC 20,1974	
2.054	586.721	02	14	DEC 20,1974	
2.071	586.838	02	15	DEC 20,1974	
2.088	586.896	02	16	DEC 20,1974	
2.104	586.955	02	17	DEC 20,1974	
2.121	587.072	02	18	DEC 20,1974	
2.138	587.247	02	19	DEC 20,1974	
2.154	587.247	02	20	DEC 20,1974	
2.171	587.306	02	21	DEC 20,1974	
2.188	587.481	02	22	DEC 20,1974	
2.205	587.481	02	23	DEC 20,1974	
2.221	587.657	02	24	DEC 20,1974	
2.238	587.774	02	25	DEC 20,1974	
2.255	587.832	02	26	DEC 20,1974	
2.271	587.949	02	27	DEC 20,1974	
2.288	588.066	02	28	DEC 20,1974	
2.305	588.183	02	29	DEC 20,1974	
2.321	588.183	02	30	DEC 20,1974	
2.338	588.242	02	31	DEC 20,1974	
2.355	588.359	02	32	DEC 20,1974	
2.372	588.476	02	33	DEC 20,1974	
2.388	588.534	02	34	DEC 20,1974	
2.405	588.593	02	35	DEC 20,1974	
2.422	588.710	02	36	DEC 20,1974	
2.438	588.651	02	37	DEC 20,1974	
2.455	589.061	02	38	DEC 20,1974	
2.472	589.705	02	39	DEC 20,1974	
2.488	590.407	02	40	DEC 20,1974	
2.505	591.401	02	41	DEC 20,1974	
2.522	593.858	02	42	DEC 20,1974	
2.539	590.758	02	43	DEC 20,1974	
2.555	591.109	02	44	DEC 20,1974	
2.572	591.284	02	45	DEC 20,1974	
2.589	591.518	02	46	DEC 20,1974	
2.605	591.752	02	47	DEC 20,1974	
2.622	591.694	02	48	DEC 20,1974	
2.639	591.986	02	49	DEC 20,1974	
2.655	591.811	02	50	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
2,672	591,928	02	51	DEC 20,1974	
2.689	591.811	02	52	DEC 20,1974	
2,706	591,635	02	53	DEC 20,1974	
2,722	591,635	02	54	DEC 20,1974	
2.739	591,518	02	55	DEC 20,1974	
2.756	591,752	02	56	DEC 20,1974	
2.772	591,694	02	57	DEC 20,1974	
2,789	591,635	02	58	DEC 20,1974	
2,806	591,577	02	59	DEC 20,1974	
2,822	591.577	03	00	DEC 20,1974	
2.839	591.518	03	01	DEC 20,1974	START JETTING
2,856	627,662	03	02	DEC 20,1974	
2,873	568.350	03	03	DEC 20,1974	
2,889	546,879	03	04	DEC 20,1974	
2,906	542,432	03	05	DEC 20,1974	
2.923	541,087	03	06	DEC 20,1974	
2.939	537,986	03	07	DEC 20,1974	
2,956	537.459	03	08	DEC 20,1974	
2,973	537,225	03	09	DEC 20,1974	
2.989	537.108	03	10	DEC 20,1974	
3,006	536,874	03	11	DEC 20,1974	
3.023	536,640	03	12	DEC 20,1974	
3.040	536.523	03	13	DEC 20,1974	
3,056	536,348	03	14	DEC 20,1974	
3,073	536,289	03	15	DEC 20,1974	
3,090	536.172	03	16	DEC 20,1974	
3,106	535.997	03	17	DEC 20,1974	
3,123	535,880	03	18	DEC 20,1974	
3,140	535,821	03	19	DEC 20,1974	
3,156	535,704	03	20	DEC 20,1974	
3,173	535,529	03	21	DEC 20,1974	
3,190	535,412	03	22	DEC 20,1974	
3,207	535,295	03	23	DEC 20,1974	
3,223	535,236	03	24	DEC 20,1974	
3,240	535.061	03	25	DEC 20,1974	
3,257	534.944	03	26	DEC 20,1974	
3,273	534,885	03	27	DEC 20,1974	
3,290	534,827	03	28	DEC 20,1974	
3,307	534,768	03	29	DEC 20,1974	
3,323	534,710	03	30	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
3.340	534.651	03	31	DEC 20,1974	
3.357	534.534	03	32	DEC 20,1974	
3.374	534.534	03	33	DEC 20,1974	
3.390	534.476	03	34	DEC 20,1974	
3.407	534.417	03	35	DEC 20,1974	
3.424	534.359	03	36	DEC 20,1974	
3.440	534.242	03	37	DEC 20,1974	
3.457	534.300	03	38	DEC 20,1974	
3.474	534.300	03	39	DEC 20,1974	
3.491	534.242	03	40	DEC 20,1974	
3.507	534.183	03	41	DEC 20,1974	
3.524	534.125	03	42	DEC 20,1974	
3.541	534.008	03	43	DEC 20,1974	
3.557	533.949	03	44	DEC 20,1974	
3.574	533.949	03	45	DEC 20,1974	
3.591	534.008	03	46	DEC 20,1974	
3.607	533.891	03	47	DEC 20,1974	
3.624	533.774	03	48	DEC 20,1974	
3.641	533.657	03	49	DEC 20,1974	
3.658	533.657	03	50	DEC 20,1974	
3.674	533.598	03	51	DEC 20,1974	
3.691	533.540	03	52	DEC 20,1974	
3.708	533.540	03	53	DEC 20,1974	
3.724	533.540	03	54	DEC 20,1974	
3.741	533.481	03	55	DEC 20,1974	
3.758	533.481	03	56	DEC 20,1974	
3.774	533.423	03	57	DEC 20,1974	
3.791	533.423	03	58	DEC 20,1974	
3.808	500.133	03	59	DEC 20,1974	END JETTING
3.825	503.936	04	00	DEC 20,1974	
3.841	511.249	04	01	DEC 20,1974	
3.858	517.743	04	02	DEC 20,1974	
3.875	523.243	04	03	DEC 20,1974	
3.891	528.508	04	04	DEC 20,1974	
3.908	533.423	04	05	DEC 20,1974	
3.925	537.225	04	06	DEC 20,1974	
3.941	541.145	04	07	DEC 20,1974	
3.958	544.948	04	08	DEC 20,1974	
3.975	548.283	04	09	DEC 20,1974	
3.992	550.740	04	10	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
4,008	553,080	04	11	DEC 20,1974	
4,025	554,660	04	12	DEC 20,1974	
4,042	556,591	04	13	DEC 20,1974	
4,058	558,872	04	15	DEC 20,1974	
4,075	561,271	04	16	DEC 20,1974	
4,092	562,909	04	17	DEC 20,1974	
4,108	564,255	04	18	DEC 20,1974	
4.125	565,659	04	19	DEC 20,1974	
4.142	567,180	04	20	DEC 20,1974	
4,159	568,760	04	21	DEC 20,1974	
4,175	570.047	04	22	DEC 20,1974	
4,192	571,217	04	23	DEC 20,1974	
4.209	572.387	04	24	DEC 20,1974	
4,225	573,440	04	25	DEC 20,1974	
4,242	574,435	04	26	DEC 20,1974	
4,259	575,429	04	27	DEC 20,1974	
4,275	576.248	04	28	DEC 20,1974	
4,292	576,950	04	29	DEC 20,1974	
4,309	577,594	04	30	DEC 20,1974	
4,326	578,355	04	31	DEC 20,1974	
4,342	578.940	04	32	DEC 20,1974	
4,359	579,525	04	33	DEC 20,1974	
4.376	579,993	04	34	DEC 20,1974	
4,392	580,519	04	35	DEC 20,1974	
4,409	581.046	04	36	DEC 20,1974	
4,426	581,514	04	37	DEC 20,1974	
4.442	581,865	04	38	DEC 20,1974	
4,459	582.216	04	39	DEC 20,1974	
4.476	582.625	04	40	DEC 20,1974	
4,493	582,918	04	41	DEC 20,1974	
4,509	583,211	04	42	DEC 20,1974	
4,526	583,562	04	43	DEC 20,1974	
4.543	583,854	04	44	DEC 20,1974	
4,559	584,088	04	45	DEC 20,1974	
4,576	584,264	04	46	DEC 20,1974	
4,593	584,556	04	47	DEC 20,1974	
4,609	584,849	04	48	DEC 20,1974	
4.626	585.141	04	49	DEC 20,1974	
4,643	585,258	04	50	DEC 20,1974	
4,660	585,609	04	51	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME		DATE	COMMENTS
		HR	MIN		
4.676	585.785	04	52	DEC 20,1974	
4.693	586.019	04	53	DEC 20,1974	
4.710	586.136	04	54	DEC 20,1974	
4.726	586.311	04	55	DEC 20,1974	
4.743	586.545	04	56	DEC 20,1974	
4.760	586.721	04	57	DEC 20,1974	
4.776	586.838	04	58	DEC 20,1974	
4.793	587.072	04	59	DEC 20,1974	
4.810	587.189	05	00	DEC 20,1974	
4.827	587.306	05	01	DEC 20,1974	
4.843	587.481	05	02	DEC 20,1974	
4.860	587.715	05	03	DEC 20,1974	
4.877	587.891	05	04	DEC 20,1974	
4.893	588.008	05	05	DEC 20,1974	
4.910	588.066	05	06	DEC 20,1974	
4.927	588.242	05	07	DEC 20,1974	
4.943	588.359	05	08	DEC 20,1974	
4.960	588.534	05	09	DEC 20,1974	
4.977	588.593	05	10	DEC 20,1974	2 GIM DP
4.994	588.769	05	11	DEC 20,1974	
5.010	589.880	05	12	DEC 20,1974	
5.027	592.571	05	13	DEC 20,1974	
5.044	594.795	05	14	DEC 20,1974	
5.060	596.901	05	15	DEC 20,1974	
5.077	598.773	05	16	DEC 20,1974	
5.094	600.353	05	17	DEC 20,1974	
5.111	601.757	05	18	DEC 20,1974	
5.127	603.102	05	19	DEC 20,1974	
5.144	604.389	05	20	DEC 20,1974	
5.161	605.442	05	21	DEC 20,1974	
5.177	606.496	05	22	DEC 20,1974	
5.194	607.490	05	23	DEC 20,1974	
5.211	608.309	05	24	DEC 20,1974	
5.227	609.187	05	25	DEC 20,1974	
5.244	609.947	05	26	DEC 20,1974	
5.261	610.708	05	27	DEC 20,1974	
5.278	611.409	05	28	DEC 20,1974	
5.294	612.050	05	29	DEC 20,1974	
5.311	612.690	05	30	DEC 20,1974	5 G/M DP
5.328	614.555	05	31	DEC 20,1974	

JOB NUMBER
8PG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA	PRESSURE	TIME		DATE	COMMENTS
TIME	(PSI)	HR	MIN		
5,344	617,817	05	32	DEC 20,1974	
5,361	620,788	05	33	DEC 20,1974	
5,378	623,235	05	34	DEC 20,1974	
5,394	625,740	05	35	DEC 20,1974	
5,411	627,895	05	36	DEC 20,1974	
5,428	630,109	05	37	DEC 20,1974	
5,445	632,148	05	38	DEC 20,1974	
5,461	633,896	05	39	DEC 20,1974	
5,478	635,585	05	40	DEC 20,1974	
5,495	637,274	05	41	DEC 20,1974	
5,511	638,847	05	42	DEC 20,1974	
5,528	640,304	05	43	DEC 20,1974	
5,545	641,644	05	44	DEC 20,1974	
5,561	642,984	05	45	DEC 20,1974	
5,578	644,265	05	46	DEC 20,1974	
5,595	645,489	05	47	DEC 20,1974	
5,612	646,595	05	48	DEC 20,1974	
5,628	647,702	05	49	DEC 20,1974	
5,645	651,722	05	50	DEC 20,1974	11 G/M DP
5,662	660,111	05	51	DEC 20,1974	
5,678	668,208	05	52	DEC 20,1974	
5,695	675,257	05	53	DEC 20,1974	
5,712	682,073	05	54	DEC 20,1974	
5,728	688,423	05	55	DEC 20,1974	
5,745	694,773	05	56	DEC 20,1974	
5,762	700,541	05	57	DEC 20,1974	
5,779	706,017	05	58	DEC 20,1974	
5,795	711,318	05	59	DEC 20,1974	
5,812	716,386	06	00	DEC 20,1974	
5,829	721,280	06	01	DEC 20,1974	
5,845	726,057	06	02	DEC 20,1974	
5,862	730,368	06	03	DEC 20,1974	
5,879	734,562	06	04	DEC 20,1974	
5,895	738,757	06	05	DEC 20,1974	
5,912	743,068	06	06	DEC 20,1974	
5,929	746,913	06	07	DEC 20,1974	
5,946	750,757	06	08	DEC 20,1974	
5,962	754,253	06	09	DEC 20,1974	
5,979	762,467	06	10	DEC 20,1974	20 G/M DP
5,996	764,564	06	11	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR MIN	DATE	COMMENTS
6.012	756.408	06 12	DEC 20,1974	START DECLINE
6.029	746.155	06 13	DEC 20,1974	FOR 30 MINUTES
6.046	737.300	06 14	DEC 20,1974	
6.062	729.436	06 15	DEC 20,1974	
6.079	721.921	06 16	DEC 20,1974	
6.096	714.639	06 17	DEC 20,1974	
6.113	707.881	06 18	DEC 20,1974	
6.129	701.706	06 19	DEC 20,1974	
6.146	695.997	06 20	DEC 20,1974	
6.163	690.404	06 21	DEC 20,1974	
6.179	685.278	06 22	DEC 20,1974	
6.196	680.501	06 23	DEC 20,1974	
6.213	675.898	06 24	DEC 20,1974	
6.229	671.704	06 25	DEC 20,1974	
6.246	667.684	06 26	DEC 20,1974	
6.263	663.839	06 27	DEC 20,1974	
6.280	660.111	06 28	DEC 20,1974	
6.296	656.732	06 29	DEC 20,1974	
6.313	653.470	06 30	DEC 20,1974	
6.330	650.557	06 31	DEC 20,1974	
6.346	647.819	06 32	DEC 20,1974	
6.363	645.139	06 33	DEC 20,1974	
6.380	642.518	06 34	DEC 20,1974	
6.396	640.187	06 35	DEC 20,1974	
6.413	638.148	06 36	DEC 20,1974	
6.430	636.226	06 37	DEC 20,1974	
6.447	634.420	06 38	DEC 20,1974	
6.463	632.730	06 39	DEC 20,1974	
6.480	631.158	06 40	DEC 20,1974	
6.497	629.526	06 41	DEC 20,1974	
6.513	628.070	06 42	DEC 20,1974	
6.530	626.847	06 43	DEC 20,1974	60 G/M ANNULUS
6.547	625.623	06 44	DEC 20,1974	
6.563	624.458	06 45	DEC 20,1974	
6.580	623.351	06 46	DEC 20,1974	
6.597	622.361	06 47	DEC 20,1974	
6.614	621.429	06 48	DEC 20,1974	
6.630	620.497	06 49	DEC 20,1974	
6.647	619.623	06 50	DEC 20,1974	
6.664	618.924	06 51	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
6.680	618.166	06	52	DEC 20,1974	
6.697	617.526	06	53	DEC 20,1974	
6.714	616.827	06	54	DEC 20,1974	
6.731	616.186	06	55	DEC 20,1974	
6.747	615.603	06	56	DEC 20,1974	
6.764	615.021	06	57	DEC 20,1974	
6.781	614.496	06	58	DEC 20,1974	
6.797	614.089	06	59	DEC 20,1974	
6.814	613.622	07	00	DEC 20,1974	
6.831	613.215	07	01	DEC 20,1974	
6.847	612.807	07	02	DEC 20,1974	
6.864	612.516	07	03	DEC 20,1974	
6.881	612.050	07	04	DEC 20,1974	
6.898	611.700	07	05	DEC 20,1974	
6.914	611.409	07	06	DEC 20,1974	
6.931	611.176	07	07	DEC 20,1974	
6.948	610.883	07	08	DEC 20,1974	
6.964	610.591	07	09	DEC 20,1974	
6.981	610.298	07	10	DEC 20,1974	
6.998	610.064	07	11	DEC 20,1974	
7.014	609.830	07	12	DEC 20,1974	
7.031	609.596	07	13	DEC 20,1974	
7.048	609.421	07	14	DEC 20,1974	
7.065	609.187	07	15	DEC 20,1974	
7.081	609.011	07	16	DEC 20,1974	
7.098	608.719	07	17	DEC 20,1974	
7.115	608.543	07	18	DEC 20,1974	
7.131	608.426	07	19	DEC 20,1974	
7.148	608.251	07	20	DEC 20,1974	
7.165	608.075	07	21	DEC 20,1974	
7.181	607.900	07	22	DEC 20,1974	
7.198	607.783	07	23	DEC 20,1974	
7.215	607.607	07	24	DEC 20,1974	
7.232	607.490	07	25	DEC 20,1974	
7.248	607.315	07	26	DEC 20,1974	
7.265	607.198	07	27	DEC 20,1974	
7.282	607.081	07	28	DEC 20,1974	
7.298	606.905	07	29	DEC 20,1974	
7.315	606.788	07	30	DEC 20,1974	
7.332	606.671	07	31	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO, 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	MIN	DATE	COMMENTS
7,348	606,613	07	32	DEC 20,1974	
7,365	606,496	07	33	DEC 20,1974	
7,382	606,379	07	34	DEC 20,1974	
7,399	606,262	07	35	DEC 20,1974	
7,415	606,145	07	36	DEC 20,1974	
7,432	606,028	07	37	DEC 20,1974	
7,449	606,028	07	38	DEC 20,1974	
7,465	605,911	07	39	DEC 20,1974	
7,482	605,794	07	40	DEC 20,1974	
7,499	605,735	07	41	DEC 20,1974	
7,515	605,618	07	42	DEC 20,1974	
7,532	605,559	07	43	DEC 20,1974	
7,549	605,501	07	44	DEC 20,1974	
7,566	605,442	07	45	DEC 20,1974	
7,582	605,325	07	46	DEC 20,1974	
7,599	605,267	07	47	DEC 20,1974	START RECOVERY
7,616	605,208	07	48	DEC 20,1974	FOR 20 MINUTES
7,632	605,150	07	49	DEC 20,1974	
7,649	605,033	07	50	DEC 20,1974	
7,666	604,916	07	51	DEC 20,1974	
7,682	604,857	07	52	DEC 20,1974	
7,699	604,740	07	53	DEC 20,1974	
7,716	604,682	07	54	DEC 20,1974	
7,733	604,623	07	55	DEC 20,1974	
7,749	604,565	07	56	DEC 20,1974	
7,766	604,448	07	57	DEC 20,1974	
7,783	604,389	07	58	DEC 20,1974	
7,799	604,331	07	59	DEC 20,1974	
7,816	604,272	08	00	DEC 20,1974	
7,833	604,214	08	01	DEC 20,1974	
7,849	604,155	08	02	DEC 20,1974	
7,866	604,155	08	03	DEC 20,1974	
7,883	604,038	08	04	DEC 20,1974	
7,900	604,038	08	05	DEC 20,1974	
7,916	603,980	08	06	DEC 20,1974	END RECOVERY
7,933	603,980	08	07	DEC 20,1974	
7,950	603,921	08	08	DEC 20,1974	
7,966	603,863	08	09	DEC 20,1974	
7,983	603,863	08	10	DEC 20,1974	
8,000	603,804	08	11	DEC 20,1974	

JOB NUMBER
SPG-11210-Z

DATE OF JOB
12-19-74

GAUGE/RUN NUMBER
98 DST NO. 28 BOTTOM INSIDE

DATE OF RUN
12-20-74

SPERRY-SUN
PRECISION SUBSURFACE PRESSURE GAUGE REPORT

DELTA TIME	PRESSURE (PSI)	TIME HR	TIME MIN	DATE	COMMENTS
8.016	603.746	08	12	DEC 20,1974	
8.033	603.746	08	13	DEC 20,1974	
8.050	603.746	08	14	DEC 20,1974	
8.067	603.804	08	15	DEC 20,1974	
8.083	603.395	08	16	DEC 20,1974	
8.100	603.395	08	17	DEC 20,1974	
8.117	603.336	08	18	DEC 20,1974	END OF TEST

487 POINTS REPORTED THIS RUN